

Chapter 1 Introduction

1.1 Research background and general information of the thesis statement

The present thesis is written with the aim of launched into the development of higher education in Taiwan. And the body of this paper is divided into five sections. The policies of higher educational system in Taiwan have been extremely concerned by experts, the officials, and the public for a long time. Meanwhile, it needs more reforms to strength the advancements of higher education absolutely. This paper focuses on the importance of improving the quality and operating performance of a private university efficiently.

The last three decades have seen increasingly growing importance placed on research in higher education. It goes without saying that higher education is central to our nation's future prosperity. Therefore, the primary research questions to be addressed in this paper are as follows. It is very necessary urgently to clarify the mounting controversy: how to improve the operating performance of a university according to its financial statement, quantity data, and the information related to the operating performance?

A great deal of efforts has been made on the efficiency of the universities. What seems to be lacking, however, is continued to discuss with other approach and perspective. Generally speaking, the half foremost of higher scores for incoming university students who are higher scores group almost choose public universities instead of prominent private universities.

The situation results in the social cultures and climate. Furthermore, Jin-Tan Liu, Shin-Yi Chou and Jin-Long Liu (2006) said, in general, public universities are

more prestigious and favored by students.¹ To the extent most of high school graduates will desire to enter the public universities even if some of them are not interested in the departments of the public universities. Owing to the social reputation, tuitions, prominent peers, future employment opportunities and so on, therefore, the public university has a better advantage than a private one in common perspective.

Intuitively, the public considers that the private university is a for-profit organization for earning the great revenue from poor students and aim to make money as soon as they can. As a result, the public has a negative assessment on a private university regards as a “wildcat school”. In fact, I consider that there is a kind of stereotype concerning the pride of the private university.

To be frank with the readers, what kind of overall educational quality does NT.130000 buy an academic year? It seems like a good time to ask the average people in the paper. The answer is, too often, the problem is not so much that the private university abuses the collective and disturbed funds ineffectively or illegally, although in some cases that is certain true. Interestingly, the higher tuition of a private university did not obtain better educational resources and teaching-quality when comparing with a public university.

Universally, the public university is getting considerable attentions not only form the high school and university students but also from the public. According the survey of the Ministry of Education (MOE), most students of the private university who have to pay the much higher expense are bored on the lower-income families. It leads the unfair situation, probably; many students of the private university would have not attended higher education without student loan supported by the central government.

¹ See [13] Jin-Tan Liu, Shin-Yi Chou and Jin-Long Liu (2006) “Asymmetries in Progression in Higher education in Taiwan: P arental education and income effects.” *Economics of Education Review*, , 25(6), 647- 658, p.648

Generally speaking, it's evidenced that most students of a private university come from lower-income families; however, have to pay higher tuition than a public university's students. It causes the heavy financial pressure to those students. Frankly speaking, the educational policies of the central government do help the students who cannot afford to attend the universities. As prior research, Henry B. Hansmann (1980) argued that certainly the polices are intended to help cover costs for students who come from families that would not otherwise be able to afford such schooling.² Student loan is a very common way that encourages students to enter universities at large.

For further consideration, Henry B. Hansmann (1980) also said, the lack of and adequate system of educational loans will lead many students fail to enter universities without financing.³ But, that is not the importance in this study because of there are too few literatures compared with other countries, meanwhile, the policy need to take more time to develop in Taiwan. To the conclusion, these higher education reforms are bound to have widespread social ramifications.

1.2. the fundamental base of higher educational system in Taiwan

Agree to the point of Gindling, T. H., & Sun, W. (2002), higher education has been of crucial importance in the economic development of Taiwan. Apparently, higher education reforms need to strengthen urgently.⁴ Until now, the aim to develop higher educational system is increasingly influenced by the government and the professional staff and experts. Higher educational system is composed of undergraduate programs, graduate programs, the continuing education, and so on.

² See [9] Henry B. Hansmann (1980) "The Role of Nonprofit Enterprise." *The Yale Law Journal*, Vol. 89, No. 5, 835-901. Apr., 1980.

³ See [9]

⁴ See [8] Gindling, T. H., & Sun, W. (2002) "Higher Education Planning and the Wages of Workers with Higher Education in Taiwan." *Economics of Education Review*, 21, April 2002, vol. 21, no. 2, pp. 153-169.

According to the definite of the education ministry, university undergraduate programs require four years of study based on the regulation, but allow outstanding students to graduate earlier.⁵

One the one hand, the higher education market is increasing influenced by a rapidly aging society and a declining birth rate, which lead Taiwan to inevitably face, a severe competition among the universities and colleges. As you can see, this related result is presented in Table 1-1.

Table 1-1 Decreasing birth rates from 1984 to 2006

School Year	Total N Babies	Birth Rate (%)	Increase*(%)
1984	371008	1.960	-----
1985	346208	1.804	-0.156
1986	309230	1.593	-0.211
1987	314024	1.601	+0008
1988	342031	1.724	+0123
1989	315299	1.572	-0.152
1990	335618	1.655	+0.083
1991	321932	1.570	-0.085
1992	321632	1.553	-0.017
1993	325613	1.558	+0.005
1994	322938	1.531	-0.027
1995	329581	1.550	+0.019
1996	325545	1.518	-0.032
1997	326002	1.507	-0.011
1998	271450	1.243	-0.264
1999	283661	1.289	+0.046
2000	305312	1.376	+0.087
2001	260354	1.165	-0.211
2002	247530	1.102	-0.063
2003	227070	1.006	-0.096
2004	216419	0.956	-0.050
2005	205854	0.906	-0.050
2006	204459	0.900	-0.004

Notes: 1. The total number of baby's annual year in Taiwan
 2. Data Source-This study based on the Ministry of the Interior, Department of Population

On the other hand, there are too many universities not only alleviate the quality of higher education but also damage the total educational resources owing to

⁵ See [23] The Ministry of Education's websites in Taiwan

diseconomy of scale.

However, students who are unable to fulfill their requirements within the designated period of time may be granted extensions of studying, up to two years. The poor employment climate makes some students want to stay on campus longer and causes to more expenses of the government and universities. Concurrently, specialized undergraduate programs such as dentistry or medicine require six to seven years, including an internship period of one year⁶. In this work, we also mention the private medical universities, which are classified into the third type, and analyze their operating performance while comparing with other non-medical universities.

The most important addition to be made what we have said about higher education is the new elite education approach- graduate schools. Moreover, graduate programs lead to a master or doctoral degree requires at least one to four years and two to seven years respectively.⁷ Meanwhile, there is the same situation over many countries. But students who enter the graduate school as part of on-job training can be granted an extension, if they fail to finish the required course or to complete their thesis or dissertation in time.⁸ The specifics will be given in the school regulations of each university.

And continuing education provides citizens not limited on any ages with an alternative way to obtain the degrees and achieve their educational goals. Based on the curriculum provided, it is classified into three main categories, including basic education, advanced study and short-term supplementary education. The study periods vary according to their curriculum design.⁹ Principally, we focus on the higher education absolutely.

⁶ See [23]

⁷ See [23]

⁸ See [23]

⁹ See[23]

The administrative and governing directions of higher education decided in 2004 are listed below: improve college and university global competitiveness, invite overseas resource persons to visit as faculty members, hire local specialists to fill teaching positions, modify and improve educational and economic development together.¹⁰ Let us consider the following quotation; world-class research centers as well as first-class and outstanding universities and colleges are pursued goals. On the one hand, the Ministry of Education (MOE) oversees the merging of universities or encourages cooperation between institutions to develop a world-class university instead of wasting massive educational resources of nation unlimitedly. On the other hand, it is not allowed to abuse and waste massive national education resources and inner expenditure.

A famous magazine, Common Wealth, indicates that professors are torn between the demands of research and teaching.¹¹ The professors have to do research and teaching within an academic year. Sometimes, the heavy teaching load makes the professor too tired to strength the research job because of lacking of full-time professors. Further considerations, with growing market-oriented situation, a private university has to emphasize the success of operating performance at large. How to meet the demands of teaching and doing research well at the limited time and educational resources?

From this viewpoint one may said that this paper is studied based on the issue: as a university, how to make use of the educational resources and all kinds of revenues, including of including tuitions, donations, government's educational subsidy, and so on. The MOE, it also encourages more flexibility among local higher

¹⁰ See [23]

¹¹ See [24] Common Wealth magazine

educational institutions to boost their autonomy and competitiveness¹², in my opinion; especially a private university has do so in the not too distant future.

In Taiwan, there is an increasing enrollment ratio from 1995 to 2005. Of course, there is an increasing importance on improving the performance of operating an educational institution.

Table 1-2 Gross enrollment ratios in higher education age by gender

School Year	Average	Male	Female
1995	39.44	38.54	40.39
1996	40.90	39.24	42.64
1997	43.08	40.71	45.58
1998	46.98	44.30	49.79
1999	50.52	48.00	53.17
2000	56.14	53.87	58.54
2001	62.96	60.44	65.62
2002	67.56	64.52	70.78
2003	72.37	68.76	76.18
2004	78.56	75.05	82.28
2005	82.02	79.14	85.08

Data source: Higher Education Department

Gross Enrollment Rate = number of actual students enrolled / number of potential students enrolled, unit: percentages

In Table 1-2, it shows that the increasing gross enrollment rate (GER) in higher education for scarce resources. Compared with GRE in 1995, GRE in 2005 is over 2 times as high as that in 1995. According to the decreasing total number of babies and increasing total number of universities and colleges, that is because the decreasing number of potential students enrolled and increasing number of actual students enrolled result this conclusion.

Also, the target audience is there are three topics that illustrate the history of higher education system over sixty years: first, from elite to universal; second, from

¹² See [25] “2006 Education in Taiwan, Minister of Education” p.12 (2006/09), and the results of the survey were published in 2006.

supervision to autonomy; third, in pursuit of outstanding development.¹³

1.3 Research Motivations

Within the last twelve years, the number of universities and colleges in Taiwan has increased dramatically, to 163, especially the expansion of the universities and vocational colleges.¹⁴ The number is based on the statistical data from the Ministry on Education. For higher education system, from elite to mass education, it seems that it is not so difficult to enter the university as before. As a result, there are too many university students to meet the labor market. The situation causes many social problems in all kinds of prospective.

Higher education system has developed for a long time all round the world. It is the most factors for fostering talents for employment and advanced research in the not too distant future. And almost everybody care about that. We can discuss with this topic in Table 1-3 as follow.

Table 1-3 Universities in Taiwan until now

Academic Year	Total	University	College	Junior College
1997	139	38	40	61
1998	139	39	45	53
1999	141	44	61	36
2000	150	53	74	23
2001	154	57	78	19
2002	154	61	78	15
2003	158	67	75	16
2004	159	75	70	14
2005	162	89	56	17
2006	163	94	53	16

Data source: the Ministry of Education

As Table 1-3 indicates, in such circumstances, it seems that there are too many universities to integrate the educational resources efficiently.

¹³ See [23]

¹⁴ See [23]

Many people also worry that “blindly open” policies for establishing new universities have resulted in diminished resources, preventing them from delivering quality education to their students.¹⁵

Compared with other countries all over the world, or the countries that have the similar higher education system as ours, the percentage of university students with respect to the total population is extremely high. The university students, professors, administrative staffs and the public consider student quality of higher education to be poor. Furthermore, 78% of professors believe that the current student population compares unfavorably with their counterparts of ten years ago.¹⁶ In recent years, the number of the universities has risen sharply in Taiwan, transforming university education from the traditionally elite education into popular education.

On the one hand, the expansion of higher education has impacted the allocation of educational resources for several years in Taiwan. The overall resources are distributed equally without establishing the mechanisms of competition and assessment for every university has different characteristics. The drawback was excessive dispersal of resources, which failed to encourage schools to establish individual quality according to their specialties and impacted the rise of academic competitiveness and excellent teaching quality.¹⁷

On the other hand, the quality of teaching and student at universities are facing challenges that needed to improve urgently. While the enrollment population of students in higher education grows rapidly, as you can see the following table 1-4, therefore, it shows that the student quality has decreased for a period of time.

In Table1-4, among the OECD (The Organization for Economic Co-operation

¹⁵ See [24] Common Wealth magazine

¹⁶ See [24]

¹⁷ See[23]

and Development) countries, we pick up 9 countries to prove the increasing gross enrollment rate by years. Taiwan's GER in 2005 is 82.5%. As you can see, compared with other developed countries, Taiwan has a higher gross enrollment rate within selected years, just is second to South Korea and United State. It is a mixed result; we can say that Taiwan is a developed country for higher education, or a country with over education absolutely.

Table 1-4 Gross enrolment ratios of higher education in selected countries

Country	2002	2003	2004
Taiwan	67.56	72.37	78.56
Japan	51	52	54
South Korea	83	87	89
Thailand	39	40	41
United State	81	83	82
French	53	55	56
Spain	61	64	66
Holland	57	58	59
Switzerland	41	45	47

Source: (1) <http://www.uis.unesco.org/> United Nations Educational, Scientific and Cultural Organization (UNESCO)

(2) <http://www.albany.edu/>

(3) Gross enrollment rate (GER) = number of actual students enrolled / number of potential students enrolled (The definition from http://en.wikipedia.org/wiki/Gross_enrolment_ratio)

Concurrently, the effect has influenced the future employment market and the distribution of human resources. As the education policy of expanding the amount of universities and colleges, the total educational resources are unable to expand correspondingly; therefore, it causes the rough problem to each of them who involved in higher education system, including students, professors, administrative staff and the government officials, more even the society. Clearly, the rapid growth of private universities affects the distribution of scared educational resources, and insufficient resources have led to stagnation of university teaching and research levels. It goes without saying that the atmosphere makes improvement almost impossible.

Several motives have combined to make me write a paper on studying the operating performance of a private university. Firstly, the students of a private university of course has to pay much more tuition and other expense than one of public university, but it is said to see that all of them obtain less educational resources from the government and the public. Those atmospheres enlarge the difference and demonstrations between the public university and the private one, and cause many unfair treatments to a private university on time. As a consequence, the main reason reduces the competitiveness of a private university naturally.

It remains an unsettled question what minister of education has to resolve the major reforms of higher education policies have aimed at transforming research-oriented or teaching-oriented faculties, and research-centered or teaching-centered among the public and private universities instead of increasing the total amount of universities in Taiwan.

Ru-Jer Wang (2003) said that the general public has always had high expectation of the role of higher education, and in response to these expectations provision has expanded considerably.¹⁸ It is said to see that average people think that the students who enter into the private colleges owing to lower scores, meanwhile, it means they are less intelligent than those students who can enter into the public universities of higher qualified.

Furthermore, there is all but the same situation in most Asia developed countries, such as Hong Kong, Japan, China, and Taiwan. And the public university takes advantage of using more funds and subsidies from the government than the private university. It is unfair for the development of higher education in the long-term.

¹⁸ See [18] Wang Ru-Jer (2003)“From Elitism to Mass Higher Education in Taiwan: The problems faced, Higher Education 46, pp. 261-287. (SSCI)

The most important and severe problem on the higher educational system is there are too many universities to increase or at least maintain the quality of higher education. In addition to the opening of more public universities, the sharp increase is also due to encouragement of more private universities. Therefore, entering a university takes the upcoming student's ease and is not notable anymore.¹⁹ However, development of higher education is aimed at higher quantity and better quality.

1.4. Objectives of the study

With the development of higher education in Taiwan, there are many issues concerning with integrity of private universities, which are in the inferior position for a long time. We picked up several developed and developing countries to analyze the results. You can see the difference between different countries all over the world.

Table 1-5 Students enrolled in higher education as proportion to total population

Country	2003	2004	Increase per year (%)
Taiwan	5.85	5.90	+0.05
China	1.16	1.49	+0.33
Japan	3.12	3.17	+0.05
South Korea	6.70	6.66	-0.04
Thailand	3.45	3.53	+0.08
Philippines	2.99	2.81	-0.18
United Kingdom	3.84	3.73	-0.09
India	1.06	1.11	+0.05
U.S.A	5.65	5.77	+0.12
France	3.55	3.58	+0.03
Italy	3.32	3.42	+0.10
Netherlands	3.25	3.33	+0.08
Sweden	2.53	2.63	+0.10

Data source: United Nations Educational, Scientific and Cultural Organization (UNESCO), unit: percentages

According to this data, Taiwan's students enrolled in higher education as proportion to total population is second to South Korea's. Therefore, it is necessary to

¹⁹ See [23]

decrease this ratio by years in order to increase the teaching-quality for higher education.

This paper emphasize on the magnitude of operating those private universities with efficient performance. In addition to attracting more funds from all kinds of sources, including tuitions, donations, government's educational subsidy, etc. however, compared with public university, private university has to make use of its budget more effectively. The objective of the survey is to gather information of the quantitative analysis of the private higher educational system. The author launch into the topics in case of the failure of a private university will cause some terrible situations in the society.

Concurrently, such a market-sensitive educational policy that most of universities want to attract the more student amount than before that they can obtain more revenues. Therefore all of them have to compete limited decreasingly student numbers in Taiwan. Moreover, this common situation has been observed worldwide, inclusive of the UK and Australia.²⁰

One of the most intriguing issues prevailing throughout the last few decades of higher education research is the question of how much focus the operating performance of a private university should be placed on the achievement of the budget. It is also a welfare state that has compromised some of the values that the private voluntary sector contributes to social welfare provision.²¹ M Lipsky, SR Smith (1989) argued in his study.

We do not argue the accuracy and availability of financial statements in this paper, and the information of financial statements is assured completely. In no

²⁰ See [20] Yamada Reiko (2001) "University Reforms in the Post-Massification Era in Japan: Analysis of government education policy for the 21st century." Higher education Policy 14(2001)277-291.

²¹ See [15] Lipsky, M. & SR, Smith (1989) "Nonprofit Organizations, Government, and the Welfare State." Political Science Quarterly.

question, it is necessary that the private universities intensify their competitiveness in order to fund more income from other parts, inclusive of tuitions, fees, and donation, subsidy provoked by the government. It may be desirable to mention shortly the points of the private universities' operating performance have been strangely neglected by critics for a period of time.

Accordingly, I have a desire to clarify the questionnaire for the goal of this thesis. Together, not only the director of broad can realize the real condition of the universities' operating performances, but also the public, the student and staff also have the rights to be aware of the information about the annual expenditures

Although prior researches have been an object of this study for a long time, there is little agreement as to understand the conducting efficiency of the private university. The intention of this paper is to achieve responsible and suggestive decision-making educational system and policies, and implementation is to improve administrative structures and so the university can quickly and flexibly responds to the demands of society.²² Yamada Reiko (2001) thinks that it is very important for the universities to meet society's needs.

Universities shall regularly carry out self-evaluation on teaching, research, services, instruction, academic affairs, administration, student participation and other proceedings.²³ In 1994, the government established the principles of university autonomy and self-determination academically. Universities are authorized to enroll students and prepare curriculum by themselves instead of being forced to achieve some goals the government made.

University presidents and academic heads of various levels are chosen by the

²² See [20] Yamada Reiko (2001) "University Reforms in the Post-Massification Era in Japan: Analysis of government education policy for the 21st century." Higher education policy 14(2001)277-291.

²³ See [26] University Act, Amendment promulgation article 5 by Hua/ Jong/ Yi/ Yi/ Tze No.: 09400212621 on Dec 28, 2005

school totally. Meanwhile, a flexible university tuition program was introduced to all the public and private universities, right now they are partially permitted to determine their tuitions. The long-lasting goal for the private universities is to increase their income and reduce spending and expenditure. Therefore they can raise the operating efficiency of school management of funds and affairs for students and board of directors.

This paper is to promote participations and discussions and to broaden the view of higher education in order to arouse public concern for higher educational issues, especially the disadvantages of a private university, and to let the public understand more about the changes in higher education of Taiwan.

University development in the society is dogged by lack of personnel and funds, especially the private universities. The government funding has been reduced on the grants by the year. The limitation on the number of personnel has led to excessively high student-teacher ratios in new and adjusted departments, namely, most of the private universities have higher student-teacher ratios than before, and the ratio of university students to full-time teachers have been raising since the educational policy works.²⁴

In table1-6, you can see the increasing student-teacher ratio within 12 years. It causes increasingly heavy pressure to the professors. Moreover, it is possible for them that no time to do the research. This data consists of public and private universities.

²⁴ See [23]

Table1- 6 The increasing student-teacher ratio in higher education

Academic Year	University
1994	14.34
1995	14.32
1996	14.51
1997	16.53
1998	17.26
1999	18.28
2000	18.98
2001	19.60
2002	20.04
2003	20.07
2004	20.08
2005	20.11

Data source: the Ministry of Education, unit: percentages

Higher education is professional and indispensable from every citizen, not just the college students and professors. When the different people have different views on the same or similar issues, it goes without saying, only rational and objective thinking logically and analysis of these issues can find out the problems to get correct decision-making in the future. Otherwise, there is no unique solution for the question: where do we go in the way of making higher education better? This is prime objective of the work.

Besides the tasks of research and teaching, all of the universities should also be engaged in social service.²⁵ It would seem advisable to make an effort to identify the operating performance of a private university through various research methods. In conclusion, higher education is a central role for our nation's future prosperity.

For these objectives to be achieved, this article is structured as follows. The first part deals with the theoretical foundations for the development of the research. After which research methodology is presented, with full details of the participants in the research, and of the instrument and procedures used. Results are then presented,

²⁵ See [23]

with a thorough description of the operating performance. Finally results are discussed and conclusions are drawn.

All in all, my goal is to make sure that the limited educational resources are distributed effectively and completely especially the private universities. In view of the preceding research purpose, several major sets of research questions to be addressed in this study are as follows:

(1)How to testify the operating performance of a private university?

And does the method conduct correctly?

(2)What indicators can prove the degree of efficiency?

(3)What are the further suggestions for the issues?

1.5 Organization of the research framework

This study covers five chapters; chapter 1 is the introduction including the background, motives, and objectives of the research. Chapter 2 deals with the review of literature, whereby related the literatures overseas were be discussed. Chapter 3 focuses on the research methods adopted. The standards for the selection of samples and the all data sources, the definitions of all the variables, the method of measurements and relevant statistical techniques will be explained. Chapter 4 is the analysis of the empirical results, and conducted for the establishment of the model. Of course, that is, the final chapter, chapter 5, presents the conclusion and suggestions for further research.

The first section of this article is the background, motivate, and object of higher education. And that is followed by some background information on the ongoing research within which the present study is carried out and a statement of the specific research questions. The second section is a review of the literature, addressing both empirical and theoretical aspects of the role of higher education all

over the world.

The third section describes the methodology and procedures for the collection of data on the private universities. Chapter 4, the results for the various analyses are presented following each of these descriptive sections. Chapter 5, conclusions and suggestions are presented for further research. This paper is structured as above. The paper investigates the assorted issues related to how the private university to attract donations from the public, consequently, generate the subsidies from the central government, the income from the incoming and existing students, and the revenue of adult's lifelong education, and so on. We have presented a general framework to perform the operating performance of those private universities so far.

To the conclusion, high-level talents constitute the most important assets, enabling Taiwan to make it on the world stage, as I mention earlier. And it is clear that the quality of the high-level talents is closely related to the quality of university teaching.²⁶

We need to restrict the word to its original use, and cite different higher educational system and policies in different nations. Generally speaking, a greater reliance on public subsidies leads to lower teacher quality ratings, William O. Brown (2001)²⁷ pointed out. Therefore, the next step of the thesis will also look forwards the direction of resolving the paradox.

The Ministry of Education (MOE) hopes to boost and enlarge the competitiveness of the private universities as well as of Taiwan.²⁸ For all the people's welfare, it is necessary urgently to solve those problems by following research. In

²⁶ See [23]

²⁷ See [4] Brown, William O.(2001) "Sources of Funds and Quality Effects in higher education." *Economics of education review* 20(2001)289-295

²⁸ See [23]

addition, Athanassopoulos, A., &Shale, E. (1997) said, In that spirit, we propose concepts of cost and outcome efficiency in order to gain further insights into the universities' operations.²⁹ As a result, I adopt the statistical based on financial statements to testify the mixed situations. So, let's go on next page.

²⁹ See [3] Athanassopoulos, A., &Shale, E. (1997). "Assessing the comparative efficiency of higher education institutions in the UK by means of data envelopment analysis." Education economics, 5(2), 117-134