

## Introduction

Export of education is a newly developed area in international trade. Export of higher education is an important embodiment of a nation's competitiveness. China's entry into the WTO brings her into the field of export of educational business. Although educational export that China provides has special advantages in some aspects, China is far behind the developed countries in this field. Export of China's higher education includes recruiting international students for campus study in China, running and administering schools abroad, and providing on-line education. Since reform and open-up, China has been making progress in many respects. Export of higher education is one of the important items that China's government attaches importance to for her future and continuous development. Therefore, the research on both the application of educational resources of China and the problems existing and countermeasures applied in export of China's higher education could provide guidance and reference for China to allocate her education resources and make adjustment in policies. Meanwhile, it offers reference to the choices of foreign investors and international students.

## Literature Review

Knight (2002) stated that export of higher education is a billion dollar industry,

including recruitment of international students, establishment of university campuses abroad, franchised provision and online learning. The supply of transnational (or cross-border) education plays an increasingly important role for the economic growth of a country (van der Wende, 2003).

### *Export of China's Higher Education Since 1949*

In 1950, there were only 33 international students admitted to study in China. In 2004, the number of international students studying in China hit 77,715. Five countries sent their students to China in 1950, and more than 160 countries did so, in 2004. (Wu & Ian, 2005)

After the reform and opening up of 1978, export of China's higher education develops greatly. The number of international students in 2004 was fifty-six times that in 1980, and nine times that in 1990. Historically speaking, the development of export of China's higher education has gone through three phases as the following:

1950-1978: The period was between the foundation of the People's Republic of China and the reform and opening up of China. During this period China's government provided the bursary to the international students coming from the countries that had diplomatic relations with China. It could not be regarded as export of higher education because China aimed at the extension of political influence (Liu, 2002). At early days of the People's Republic of China's foundation, the range and the quantity of international students were quite limited: Only would the students from socialism countries be accepted. Later on, the

countries in Asia and Africa, which had good relations with China, were also included.

During the period of 28 years, more than 12,800 international students studied in China with the bursary provided by China's government.

1978-1989: It was after China's reform and opening up, and before 1989. At this phase, universities, which accepted international students with the governmental bursary of China, were permitted to accept international students who paid for themselves. Because of the restriction and limitation on the enrollment during this period, the number of self-paid international students was small, for example, 300 in 1978 and around 2,500 in 1989 (Zhou, 2002).

1990—now: After the 1990s, the China government has brought the recruitment of self-paid international students into a legal system (Hu, 2000). The Education Ministry of China promulgated such regulations as *The Regulations for the Examination and Approval of Chinese Language Teachers* in 1990, *The Measures for HSK* in 1992, and *Regulations for Recruitment of Self-paid International Students* in 1999. The regulations authorize some universities to recruit self-paid international students, and transfers the power of examining if universities are qualified for recruit such students to the local administrations.

Bennell and Pearce (2003) stated that trade in knowledge and skills will grow exponentially when the pressures on governments for creating a 'high skill' society

continue to intensify and trade barriers are removed due to the widespread enforcement of WTO provisions. In recent years, with the building up of China's comprehensive national power, export of her higher education has been increasing rapidly. The number of international students was 10,490 in 1992, 34,617 in 1995 52,150 in 2000 61,869 in 2001 85,829 in 2002, 77,715 in 2003, and 80,143 in 2004. After 2000, the number of international students increases by 20% each year. Wang (2004) stated that due to the SARS, less international students came to China in 2003, but the scale of educational export remained at a steady level. Even though there are more and more international students coming to China, on the whole, the development of educational export of China is seriously imbalanced. Only are developed areas of China attractive to international students (Dai, 2005).

#### *Status Quo Analysis of Export of Higher Education of China*

Beijing is the most important center of China's history development. She has special advantages in developing educational export. The study mainly took Beijing as an example to analyze the general situations of export of higher education of China.

##### *Analysis of trade mode.*

Consumption abroad: From 1999 to 2004, 40% (127,000) of the international students in China studied in Beijing. In 2004 alone, 29,000 international students from 156 countries studied in Beijing, accounting for 3% of college students on campus. (Qi, 2004)

Most of the international students study in the universities that offer outstanding programs of language and art. Even though the universities with programs of science and technology are in the majority in Beijing, the international students prefer to learn language and art. International students were mainly from Asia. The top seven countries with students to study in China are Korea, Japan, America, Vietnam, Indonesia, Thailand and Germany.

Commercial presence: Since China entered into the WTO in 2000, agreements for opening up of education have been signed with other countries, which provides preconditions for China to run schools abroad (Guo, 2004). In fact, China lags far behind other countries in running and administering schools abroad. The number of overseas branches set up and run by institutes of higher education of China just reached 30 in 2004. Most of which were located in Hong Kong, Macao, Japan, British, Singapore and Malaysia. Apart from the courses like Chinese language and culture and Chinese medical science, the branches provide the programs which confers degrees.

Cross-border supply: A few language universities provide language courses to international students abroad by e-learning programs and other kinds of distance education. Cross-border supply will be in great deal potential to combine more consumption abroad and commercial presence together. Hence more support and input from society is required for this type of trade mode. (Wu, 2002)

*Analysis of major problems.*

Small scale and big unbalance of trade: Firstly, the number of international students is not big. The total number of the international students in China was only about 80,000 by the end of 2004. Secondly, the international students account only for small part of college students on campus. As mentioned above, the international students studying in Beijing in 2004 just account for 3% of college students on campus in Beijing.

Unbalance of trade in education service refers to the big difference between the volumes of import and export. There were 117,300 Chinese students that studied abroad in 2004, and the expenses for their study and living abroad reached 13.2 billions RMB. On the other hand, the international students in China spent 5.4 billion RMB in 2004. The adverse balance came to 7.8 billion RMB.

Unreasonable structure of export: Reviewing the schooling programs, only 33.7% of the international students in China study for degrees, and 7% pursue degrees higher than post-graduate. Therefore, it can be seen that they came to China mainly for training.

From the analysis of international students' home countries, it can be found that most of the students were from Asia, accounting for 84.93% of international students in China. From the analysis of courses provided, it is noticed that Chinese language, Chinese medicine, Chinese operas and so on are international students' favorites, while the subjects like art, science, technology, medicine, sports, and commerce are less popular.

Huang (2004) Products of Chinese traditional culture have a great lure for international students. Here, it is clear that cultural environment should have influences upon the development of educational business of a country, especially when the country is faced with the international competition.

#### *Status Quo Analysis of Export of Higher Education in Developed Countries*

Since the late 1980s, the internationalization of higher education provision has been consistently identified as a major trend especially for universities in developed industrial countries (Bennell and Pearce, 2003). According to the estimation of Organization for Economic Cooperation and Development (OECD), the countries of OECD admitted 1.5 million international students in 1999 alone. The report of the International Education Service Forum of OECD/US 2002 showed that the number of international students looking for higher education will increase from 45 million in 1999 to 150 million in 2025, and the volume of export of higher education will hit 30 billion USD, 3% of the total service trade volume of OECD. The top three countries of educational export, in order, are Australia, New Zealand and America. Their educational export volumes of these three countries account for 11.6%, 4.9% and 3.8% of their own service trade volume, respectively.

The development of international educational trade is imbalanced in different areas. The developed countries always have more exporting than importing. The goal of the

educational export of developed countries is to obtain commercial and economic benefit.

The economic factors play a very important role in this progress. (Liu, 2005)

*Export of higher education in the USA.*

The USA has always been the country accepting the most international students. The total number of the international students in OECD countries was 1.42 million, and 31% of which were in America. (Research Group for International Education Service Trade, 2004) It is estimated by the Education Ministry of USA that the number of international students increased from 311,880 in 1981 to 514,723 in 2003. The American educational export volume reached more than 10 billion in 2003 alone. It resulted in the favorable balance of 8 billion, which accounted for about 10% of the America total favorable balance and also reached approximately one third of the consumption of international students in OECD countries. It is clear that America's high quality educational resources and her influence on the world are irreplaceable.

From the analysis of schooling educational structure, it can be seen that international students in America for training are much fewer than students for degree. From the analysis of majors, it can be found that most the international students in America choose commerce, industry, life sciences, mathematics, computer technology and so on for their study. The students in such fields occupied 52.8% of the international students in 2003. (Li & Cheng, 2004) Zhang (2002) stated that from the area distribution, it is clear that the

major market of American educational export is Asia, which consumes more than 60% of her educational export. Europe and Latin America are located in the second and the third places of the consumption. Meanwhile, it is easily understood that the levels of economy, science and technology, and industry of a country play an important role in expanding her business competence in every respect.

*Export of higher education in Australia.*

The international students in Australia reached 39,685 in 1995, 52,829 in 1997, 60,914 in 1999, 86,269 in 2001, and 136,252 in 2003, which led to the increase of the trade volume from 6 million in 1970 to 21.55 billion in 2003. (Research Group for International Education Service Trade, 2004)

When the WTO issued the General Agreements on Service after 1995, Australian universities took this opportunity, and developed Australian educational institutions abroad. The Agreements regulate that the member countries must try to reduce the trade barriers and be able to provide educational services in the form of commercial presence. Australia's government was very responsive to the situational changes from the issuance of the WTO regulations. The government promulgated relevant laws and regulations, and adjusted policies for facilitating and normalizing the development of her educational business. According to the Australian Presidents Committee's report in 2003, 38 universities have established 2,009 educational projects abroad. (Zhang, 2004) The

structure of the international students in Australia has changed a lot for the past few years. the weight of conveying her higher education to other countries through long distance learning increased from 5.9% of total trade volume of her higher education in 1996 to 11% in 2003 (Sang, 2003).

*Export of higher education in Japan.*

For the past few years, the increase of the number of international students has been remarkable. It increased from 55,575 in 1999 to 111,130 in 2004. The average increasing rate is 20%. (Japan Ministry of Education, 2004a)

From the analysis of the study level, the number of the international students for degree reached 89,000 in 2004, which was 80.1 % of that year (111,130). The non-degree study was mostly for visit scholars and students for learning Japanese. From the analysis of majors, students majoring in social science and literature account for 25.6% of all students, and the students majoring in science and technology account for 16.6%. (Japan Ministry of Education, 2004) Compared with other countries in Asia, Japan is in the ascendant in science and technology, which is the reason for many Asian countries to send their students to Japan to learn advanced technology. Here, Japan shows her competence derived from her tradition and the achievements of science and technology for development of educational business.

## *Summary*

As discussed above, several factors of a country show their effect on export of educational business, especially higher education, such as science, economy, industry, culture, law and policy. China has been making progress in many respects in a short period of time, but there is still a gap between educational business of China and that of well-developed countries. Whether China can catch up with other developed countries in such a field also in a short period time is a question which is not only interesting but also worth studying. The study tried to investigate the development of export of higher education of China in the following three variables, Environment (the independent variable), Education Authority (the adjustment variable), and Education Service (the dependent variable). The variable, Environment, included the four dimensions such as economic environment, scientific environment, industrial environment, and culture environment. As for the two variables, Education Authority and Education service, the former had the two dimensions of policy and law, and the latter strength and weakness.

## Methodology

### *Research Sample*

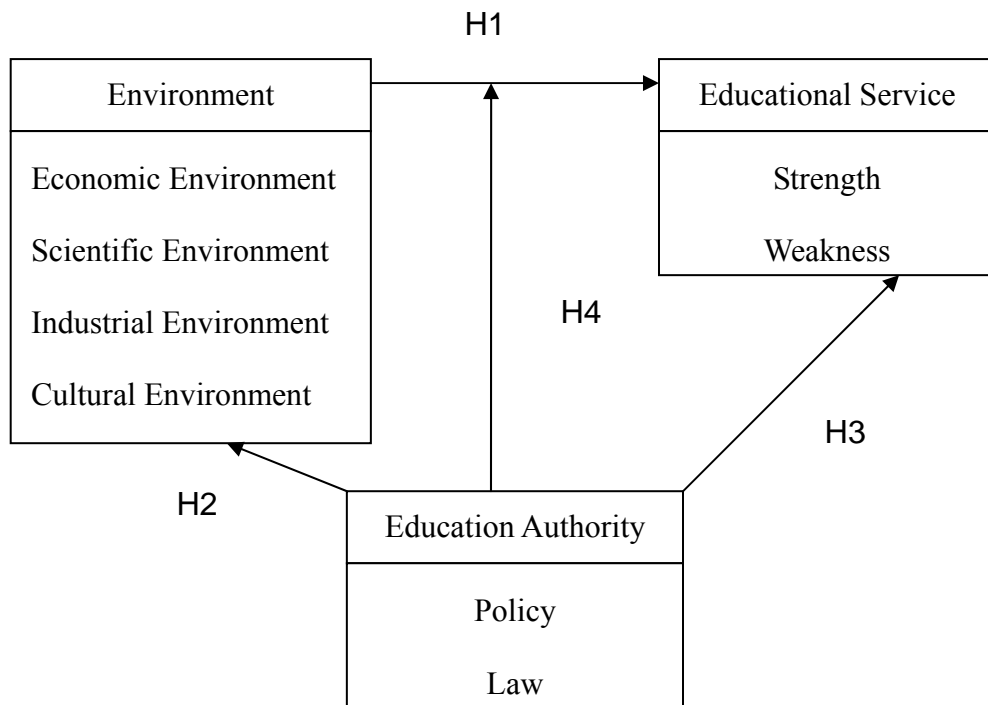
In this research, samples were chosen by way of convenience for sampling. Beijing region covers more than 70 key colleges and universities and has the highest density of distribution of higher education institutes of China. She is the center of politics and culture, and a center of economy. She has more resources than any other places of China.

Therefore, the international students, teachers and administrators of institutes of higher education in Beijing region of China, which were taken as samples, were responsible for filling questions about the variables such as education authority, education service and environment, in 700 questionnaires. However, 650 questionnaires were reclaimed. Every answer in the questionnaire reclaimed could represent the valid sample for the variables that the customers of institutes of higher education service Beijing region of China acknowledged. Therefore, it conformed to the tenor of research for the development of China's higher education service trade.

#### *Research Framework and Hypotheses*

Based on the literature review in the previous section, the framework for the study was developed and shown in Figure 1. Major objectives for the study were to discuss the correlations among the four dimensions of environment, the two dimensions of education service and the two dimensions of education authority. Moreover, the adjust effect of education authority on the correlation between education service and environment was further discussed.

There are four hypotheses in the study, as shown in Figure 1.



H1: There is a positive correlation exists between Environment and Education Service.

H2: There is a positive correlation exists between Education Authority and Environment.

H3: There is a positive correlation exists between Education Authority and Education Service.

H4: Education Authority has an adjustment impact on Environment and Education Service.

H4 was split to the following four sub-hypotheses, H4a, H4b, H4c and H4d.

H4.a: Education Authority would enhance the positive correlation of Cultural Environment with Weakness and Strength, respectively.

H4.b: Education Authority would enhance the positive correlation of Economic

Environment with Weakness and Strength, respectively.

H4.c: Education Authority would enhance the positive correlation of Scientific

Environment with Weakness and Strength, respectively.

H4.d: Education Authority would enhance the positive correlation of Industrial

Environment with Weakness and Strength, respectively.

#### *Research Tool and Scale*

##### *Tools for analysis.*

Through SPSS, the followings such as Factor Analysis, Reliability Analysis, Basic Descriptive Statistics Analysis, Pearson's Correlation Analysis, and Multiple Regression Analysis were carried out.

The scale used for evaluating questions of the questionnaire here was mainly 6-point Likert Scale. After the questionnaire questions of each factor were confirmed by way of Factor Analysis, internal reliability analysis was then made on all questions in each factor in the study. If being found to be excessively low in reliability, the questions would be deleted. However, no questions were found to be excessively low in reliability in questionnaire scales. Therefore, all questionnaire questions were those of each scale as well as the basis of each statistics analysis in the study.

##### *Analyses on scales.*

According to data and literature review in the study regarding China's higher education service trade, 11 more important questions were used to construct the Scale for Environment. Four dimensions of Environment were deduced from Factor Analysis. Cronbach's  $\alpha$  of separate dimensions were 0.83(Scientific Environment), 0.77(Industrial Environment), 0.64(Cultural Environment) and 0.62(Economic Environment). In this study, Principle Components Analysis was made in dependence of the answers filled in sample questionnaires. After Direct Oblimin, explanatory variance was 68%. The result of Factor Analysis was shown in Table 1. The Scale for Education Authority was constructed with 5 questions, including schools jointly run by China and other countries, temporary administration regulations of school running, management of students in China, policies and law, and stand's support. It was learned from Factor Analysis on this Scale that explanatory variance was 60% and Cronbach's  $\alpha$  was 0.84. The Scale for Education Service Trade was composed of two parts, Strength and Weakness. It was learned from Factor Analysis that explanatory variance was 81% and Cronbach's  $\alpha$  was 0.97.

Table 1

*Scale for Environment*

Questions	Average	S.D.	Environment			
			Scientific	Industrial	Cultural	Economic
Q1	3.48	1.485	0.871			

Q2	3.53	1.463	0.867		
Q3	3.48	1.480	0.858		
Q4	3.44	1.109		0.841	
Q5	3.44	1.112		0.840	
Q6	3.45	1.133		0.797	
Q7	3.63	1.780			0.854
Q8	3.68	1.774			0.852
Q9	3.69	1.689			-0.757
Q10	3.79	1.648			-0.748
Q11	3.76	1.660			-0.736
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RSSL			2.308	2.177	1.527
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EV(%)			21.753	21.086	14.824
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CPV			21.753	42.838	57.662
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Cronbach's $\alpha$			0.83	0.77	0.64
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*Note.* RSSL (rotation sums of squared loading),EV (explanatory variance),CPV (cumulative percent of variance),

Q1 (research activities), Q2 (experiment design), Q3 (growth of science and technology), Q4 (population growth), Q5 (comparison between competitors), Q6 (strategies of competitors), Q7 (culture and history), Q8 (international exchange), Q9 (attracting students), Q10 (economy development), Q11 (mutual recognition of academic record).

## Results

The total average score of Scale for Environment was higher than the average value of 3.0 in the 6-point Likert's Scale. Therefore, it could be seen that these questions of the questionnaire in the study regarding Environment truly exist. The four dimensions (Scientific Environment, Industrial Environment, Cultural Environment, and Economic Environment) play an important role in Environment. The situation for Scale for Education Authority or Scale for Education Service is the same as that for Scale for Environment. It could be inferred that dimensions of Policy and Law play an important role in Education Authority, and so do dimensions of Weakness and Strength in Education Service.

Except Scientific Environment (-0.028/-0.016), each of the rest three dimensions of Environment is in a positive correlation with Education Service. Therefore, H1 hypothesis is partially tenable.

Except Economic Environment (-0.063), each of the rest three dimensions of Environment is in a positive correlation with Education Authority (as shown in Table 2). Therefore, H2 hypothesis is partially tenable.

It could be learned from Table 2 that there is a positive correlation between Education Authority and Education Service. Therefore, H3 is tenable.

Table 2

*Pearson's Correlation Analysis of Variables (Sample Size 650)*

	Environment				Education
	Scientific	Industrial	Cultural	Economic	Authority
Scientific	1	0.082	0.023	-0.149	0.636
p-value		0.037**	0.553	0.000***	0.000***
Industrial	0.082	1	-0.152	0.180	0.045
p-value	0.037**		0.000***	0.000***	0.251
Cultural	0.023	-0.152	1	0.067	0.070
p-value	0.553	0.000***		0.086*	0.076*
Economic	-0.149	0.180	0.067	1	-0.063
p-value	0.000***	0.000***	0.086*		0.109
Education Authority	0.636	0.045	0.070	-0.063	1
p-value	0.000***	0.251	0.076*	0.109	
Strength	-0.028	0.085	0.033	0.229	0.083
p-value	0.481	0.030**	0.396	0.000***	0.033**
Weakness	-0.016	0.084	0.034	0.219	0.096
p-value	0.685	0.032*	0.380	0.000***	0.014**

Note. \*\*\* represents p-value less than 0.01; \*\* less than 0.05; \* less than 0.1.

From t-values of Cultural Environment (Table 3), t-value of the partial sample with more stress on Policy (1.260) was the only one higher than that of the entire sample (0.169). Therefore, H4.a hypothesis was partially tenable.

It could be learned from t-values of Economic Environment Dimension in Table 3 that t-values (Strength: 5.557; Weakness: 5.384) of the entire sample was higher than those of the partial sample with more stress on Policy (3.999; 3.343) or those on Law (2.339; 3.826). Therefore, H4.b hypothesis is untenable.

From t-values of Scientific Environment (Table 3), t-value of the entire sample is lower than that of the partial sample with more stress on Law. Therefore, H4.c hypothesis is partially tenable.

From t-values of Industrial Environment (Table 3), t-value of the entire sample is lower than that of the partial sample with more stress on Policy and that on Law. Therefore, H4.d hypothesis is partially tenable.

Table 3

*Multiple Regression Analysis*

		Partial Sample on		Partial Sample on Law	
		Policy (N=325)		(N=325)	
Strength	Weakness	Strength	Weakness	Strength	Weakness
Entire Sample (N=650)					

Intercept	Coefficient	11.969	7.164	12.259	7.599	16.033	7.283
	t-value	8.131	8.026	5.642	6.266	6.986	5.806
	p-value	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***
Cultural	Coefficient	0.055	0.036	0.170	-0.060	0.012	-0.051
	t-value	0.672	0.710	1.530	-0.828	0.104	-0.682
	p-value	0.502	0.478	0.127	0.408	0.917	0.496
Economic	Coefficient	0.375	0.217	0.392	0.190	0.242	0.212
	t-value	5.507	5.260	3.958	3.439	2.311	3.695
	p-value	0.000***	0.000***	0.000***	0.001**	0.021**	0.000***
Scientific	Coefficient	0.000	0.011	-0.033	0.006	-0.166	0.025
	t-value	0.003	0.268	-0.313	0.131	-1.471	0.488
	p-value	0.998	0.789	0.754	0.896	0.142	0.626
Industrial	Coefficient	0.115	0.070	0.034	0.124	0.066	0.109
	t-value	1.252	1.256	0.249	1.665	0.465	1.417
	p-value	0.211	0.209	0.804	0.076	0.643	0.157
	R square	0.055	0.051	0.062	0.054	0.029	0.055
	F –value	9.422	8.618	5.247	4.556	2.401	4.683
	Dubin-Watson	6.294	3.816	6.177	3.759	6.525	3.887

*Note.* \*\*\* represents p-value less than 0.01; \*\* less than 0.05; \* less than 0.1.

Cultural Environment is in a positive correlation with Strength and Weakness. Policy can enhance the positive correlation between Cultural Environment and Strength.

Scientific Environment is in no correlation with Strength and Weakness, but Law can enhance the positive correlation between Scientific Environment and Weakness.

Industrial Environment is in a positive correlation with Strength and Weakness. Either Policy or Law can enhance the positive correlation between Industrial Environment and Weakness.

Education Authority has no significant impact on the correlation between Economic Environment and both dimensions of Education Service (Strength and Weakness). This may be due to the existing higher correlation between Economic Environment and the two dimensions. Therefore, Education Authority can not show further impact on these dimensions.

## Discussions

The study centered on export of China's higher education, and tried to make suggestions on policies of such business based on two approaches. One was the analysis of economic, scientific and technological, industrial, and cultural environment for China's higher education, the other was the analysis of the advantages and disadvantages of

Chinese education institutions.

*Policy and Law Matter*

To propel the development of China's higher education, Chinese government has consistently advocated international exchange and cooperation. The implementation of study-abroad policy of "encouraging Chinese students to go abroad and guaranteeing their freedom of coming and going" has complemented to some extent the shortage of high quality resources of China's higher education. In addition, China has also made some active and necessary preparations, and taken some helpful steps to provide supports in terms of policy and laws and regulations through the followings: the decentralization of the recruiting system in higher learning institutions, the policy implementation of mainly recruiting self-funded students, and the staging of a series of laws and regulations on regulating educational services such as *Regulations on Sino- Cooperation in Running Schools, Interim Provisions for Running Schools Overseas by Higher Learning Institutions, and Rules on Students' Enrollment in China's Colleges and Universities*. This demonstrates that China government holds a positive attitude towards developing trade in educational services. In spite of China's government's strengthened supports for policy in recent years and the policy favor for the trade development in educational services, the government's role in such business is still far from enough, and seems without the full motivation of enthusiasm from all sides. This is due to the traditional concepts, including

relying on government's running education, the lack of the systematic analysis and research on the pertaining state and trend of educational services, the lack of lifting it to the status of an industry, and the lack of the long term strategic regulation.

### *Environment for Educational Services*

#### *Economic environment.*

The manifestation of international economic integration is the cross-national flow of production factors such as capital, talents, and technology, etc. The economic fluctuation of the United States always shows an impact on the world economy, while the economic development of China has witnessed a steady growth with the continuous GDP growth rate of over 9% for years. The projections by International Monetary Fund and the World Bank on economic developments at the global level in major country groups indicate that the hot spot of the world economy is in Asia and China's economy is taking itself to a higher level with its continuous growth. At present, the transnational companies are conducting a globally economic and industrial restructuring by transferring their modern production base to China, which creates an opportunity for China to attract more international students. China's entry into WTO has also brought the country unprecedented challenges as well as opportunities for development. China can secure more legal rights and benefits through fair and equal negotiation, sign more agreements on

mutual recognition of education credentials with more countries, and consult with more countries about opening up the market of higher education.

*Scientific environment.*

Presently, the broad space for scientific and technological development makes it impossible for any country to take a lead in technology of all fields such as microelectronics, new material, new energy, bioengineering, space and sea and the like. Due to the needs for huge amount of information and advanced experiment equipments, most research institutions used to be located in developed countries and regions. Today, the advanced experiment equipments can be quickly set up in Chinese higher learning institutions under the dynamics of modern logistics, which creates the opportunity for Chinese higher education that possesses rich intelligence resources to conduct research in the frontline of international competition. Moreover, China has also witnessed the fast development of science and technology. Some of disciplines in China have reached the internationally advanced level, for instance, bioscience and hydraulic engineering. China also sees rich and abundant achievements in scientific research. China had around 180,000 science and technology papers published in 2000. Of which, about 50,000 papers were published in international journals and took 3.6% of the total number of world papers of that year. The achievements made China jump to number 8 in world ranking of research. China surpassed Russia and Spain for the first time in her history.

*Social and cultural environment.*

There exist the vast difference between Eastern and Western civilizations and this cultural difference determines the fact that there must be many students coming to China to study. China is the cradle of the world's civilization and Beijing is a city of over 3,000 years of history and of over 800 years as China's capital. With a very rich cultural and historical heritage accumulated over the history, Beijing is the condensation and representation of thousands of years of ancient history of China and the East, is where modern culture and ancient culture join and Chinese culture and world culture meet, and has a big impact on and attraction for the overseas.

*Industrial environment.*

Competitors: Competitors refer to the educational institutions planning to start business in or having already entered the international market, and those running the same educational services. The former may be called a potential competitor, the latter a current competitor. These two types of competitors are influencing the level of profit making and the market share of educational institutions to a various extent. Only when the consumers and both the current and potential competitors are taken into consideration, can the scientific judgment be reached on the whole industrial environment we are facing. With regard to the competitors, there is a need for the analysis of the intensity of competition of the current educational services in the import countries. The competition intensity

includes the level of educational services in import countries and the strategies taken by the competitors. The above are the factors that educational institutions need to take into consideration when entering the target country's market. Although the intensity of competition in the field of education is much weaker than that in other industries and cooperative competition always happens, the intensity is still strengthening from the perspective of global educational market. Countries with high level of educational development, such as the U.S., Germany, and France, take a big share of the global market by means of their high quality education and excellent research facilities. With English as their native language, Australia, New Zealand, and the U. K. are showing the language advantage and becoming the big educational export countries. The U.S. and the U.K. are able to attract the top talented people throughout the world and their education institutions offer all kinds of scholarships to international qualified students. What is more important is that the educationally developed countries are always actively seeking ways of weakening the trade barrier of international educational services so as to expand the market share of international education. Furthermore, educational institutions in many countries are utilizing various marketing facilities targeting specific markets through big investments, such as international educational fair, Internet, agents, and specific consulting agencies.

Buyers: The popularization of lifelong learning and higher education has generated a

new round of challenge for the world's higher education. The report from OECD/US2002 on trade in international educational services indicates that the world number of students in higher education will increase from 45,000,000 in 1990 to 150,000,000 by the year 2025, which means that there will be an annual increase of 3,000,000 in the international educational market. However, many developed countries have already realized the objective of popularization of higher education, and their educational markets are almost saturated. Therefore, such an increase will be mainly in developing countries, which creates an opportunity for development of higher education of China. China has been seeking to explore overseas markets. The reinforcing of educational reform in China for the past few years has enhanced the capacity of her higher education to face the market competition. Due to the abundance of educational products in the international market and the varieties of students' needs, it is a must for educational institutions better the understanding of students' consumption in such a market. Therefore, it is extremely important to provide different educational products and adopt proper strategies of educational marketing for competition.

#### *Advantages and Disadvantages*

##### *Advantages.*

Compared with the educationally developed countries in terms of the overall competence of higher educational services, China is on a weaker side. However, China is

still able to show the following advantages of developing educational services trade.

Advantage of consensus: China has understood what the importance of the educational service trade for development of a country is, since the introduction of the notions of both education industrialization and educational business at China Communist Party's 15th National Congress in 1999. The notions have never appeared during the period of planned economy of China. With China's entry into WTO, the educational service trade has been brought to the front stage by both government and educational institutions under WTO terms. Therefore, China's government has in turn staged a series of policy and relevant regulations like *Rules on students' Enrollment in China's Colleges and Universities*, *Notice of Implementing the Annual Assessment System of Chinese Government Scholarships*, and *Regulations on the Management of Chinese Government Scholarship*, which tells that China government has brought the educational service trade into the orbit of legalization. Beijing Municipal Education Commission clearly stated in 2003 that Beijing would recruit up to 40,000 international students in 2004, and the number will increase to 80,000 by 2008. This can be seen as a good beginning of a strategic prospect. In addition, institutions give more and more emphases on economic benefit brought by international students. According to the China Scholarship Council (CSC) affiliated with the Ministry of Education, from 2002 quite a number of Chinese higher learning institutions have teamed up to visit six countries such as New Zealand, Australia and so on, and to weigh

the overseas educational market. All these facts illustrate that, a consensus which works together to attract more and more students to study in China has been reached from government to institutions as far as the educational service trade is concerned.

Advantage of Chinese language: From the perspective of world development, mandarin education has become a new spotlight in the field of education, which is mainly due to the following reasons: (a) A great number of overseas Chinese expect their children to have the opportunity to receive some Chinese language education in order to maintain the traditional Chinese culture; (b) China's development has earned the world's attention and is playing her due role on the world stage. After her entry into WTO, China has begun to integrate into the world trade mechanism and become the most important factory of the world. Many countries have desires and demands to better and strengthen their understanding of China, especially the developing countries that expect to learn about developing experience from China and the countries who have significant trade ties with China. All these activities must be built upon the acceptance of Chinese language education. (c) Many foreign scholars are fascinated by the profound Chinese civilization. Learning Chinese language is a must for understanding Chinese civilization.

China can take advantage of this trend by recruiting students on a large scale and can even provide Chinese language educational service overseas. At present with more and more people learning Chinese in the international market, the demand for Chinese

language education has also become bigger and bigger. According to statistics, now over 2,100 universities in 85 countries offer Chinese language courses. In addition, Chinese courses are also offered through many high schools and elementary schools as well as some non-governmental organizations. The number of people learning Chinese in different countries reaches the level of 30,000,000. Actively recruiting international students and directly running schools overseas can facilitate development of educational service of Chinese language.

Advantage of some disciplines: It should be admitted that many subjects offered by Chinese universities lag behind those by the developed countries, especially in science and engineering field. However, the absolute advantages of some disciplines do exist, including the exclusive Chinese medical science and Chinese medicine, Chinese history, Chinese architecture, literature, and drama. On one hand, there is a solid foundation for these disciplines. On the other hand, the inseparable connection of these disciplines with the traditional Chinese culture makes it a big magnet for international students with the strong curiosity about China, especially for those who are from Asia, Europe and America.

Moreover, China also enjoys a world leading position in some newly emergent disciplines, for example, bioscience. Chinese bio-scientists have made unprecedented achievements in research and application of bioscience. As anticipated, bioscience

research and application level of China will be neck and neck with those of Europe and the U.S. This is a strong attraction to international students, particularly those from developing countries.

Advantage of price: Cost is the main factor that affects the flow direction of international students on the basis of the same quality of educational services. China also adopts the policy of high tuition for international students; however, the tuition level of China is still far lower than that of countries like the U.S., the U.K., Australia and Japan. Take the tuition of the science program for an undergraduate for example. The annual tuition fee is £5,700-8,900 in the U.K. which equals 70,000-100,000 Chinese Yuan and the annual living cost is £5,000 which equals 50,000-60,000 Chinese Yuan. The annual tuition fee and living cost in Japan is around 150,000 Chinese Yuan.

In addition, China employs a total cost strategy to set the price. According to the *1997 Regulations on Tuition Charging Standard for Self-Funded International Students in China*, the annual fee for undergraduate arts program is 14,000-26,000 Chinese Yuan, and for science and engineering students, it is 10%-30% higher than that of the arts category. The annual living cost in China is as low as 20,000-30,000 Chinese Yuan compared with that in other countries. Although the matter of cost is not the determinant factor for the flow direction of international students, it at least plays a certain role in the decision making of international students from developing countries.

Advantage of late-start: The so-called advantage of late-start implies that those countries which start developing later (SL) have more advantages and can develop much faster than those which start early (SE) during the process of modernization. This is because SL's can learn from the experiences with which SE's made achievement of science and technology and management. The competence of higher educational services of China is relatively weak, compared with that of educationally developed countries. Through international exchange and cooperation, China undoubtedly has the opportunity to introduce from abroad the educational resources of high quality, such as curriculum system, management mode and teaching methodology, etc. With the experiences and the fully-fledged industrialization mechanisms from other countries as reference, the competence of China's education can be improved a lot and unnecessary detours of educational development of China will be avoided.

*Disadvantages.*

The lack of high quality educational resources: Educational resources include discipline setup, faculty, capital investment and so on. China has advantages in disciplines relevant to traditional Chinese culture; however, for most of the newly emerging disciplines and the interdisciplinary subjects, China has to import/introduce such subjects from other countries to meet the market needs. On the other hand, China offers a very limited choice for the study of international students. Only around 200 subjects in China can be offered

to international students, while the number of subjects available in developed countries is up to a thousand for students' needs.

Faculty is a crucial factor that decides the quality of educational product. Excellent faculty is helpful for attracting excellent students. The top universities outside China all have faculty members of high quality and excellence. Nowadays, the majority of faculty members in higher learning institutions of developed countries hold doctorate degree. In the U.S., for example, the position of assistant professor and above is only open to applicants with doctorate degree. In Germany, it is clearly stated that professors and teaching assistants must hold doctorate degree. However, the situation in China is different. Compared with other cities of China, Beijing has a quite developed higher education, but as the statistics showed in 2001, only 15.8% of full time faculty members of higher educational institutes in Beijing hold doctorate degrees and 32% hold Masters degrees in 2001.

Capital is the premise for maintaining educational resources of high quality because only with sufficient funds can the U.S. universities guarantee their significant contributions to the world in terms of research and talent training. It is well known that China faces the severe lack of educational funds because of the fact that she lacks a multi educational investment mode. Educational institutes of China used to rely mainly on government allocated funds. The institutes can not facilitate the jobs of conducting

research and attracting talented people by sole dependence on such funds.

Educational resources of high quality are the basis of producing excellent students. Publicly known as a country with the most developed educational services, the U.S. has turned out students recognized throughout the world. The fact shows educational resources of high quality is inseparable with such public praises. The U.S. has world highest achievements in scientific research, world-class master figures, and the most advanced experiment equipments, which are what the students over the world are yearning for. On the other hand, although Beijing also possesses relatively developed education, she is still in a disadvantageous position in this regard.

The lack of well-established study environment: Student organizations are very common in some countries and usually the emotional reliance of students studying abroad. Such organizations are also an important bridge for a school to communicate with and manage international students. In fact, the establishment of student organizations is not encouraged in China. China can not provide an environment which covers a wide range of needs of students studying abroad. The environment has certain limitations in the living and socializing, and emotional communication of international students. The environment does not promote the communication and exchanges between international students and local Chinese students, which goes against WTO principle of Citizen Treatment. On the other hand, the social service system of China has not been set up to meet the multiple

needs of international students. For example, for the purpose of lowering down the expenses, many international students rent a place off campus, but the corresponding rental market is not well established yet.

The lack of marketing facilities: The educational service trade of developed countries like the U.S., Australia, and Japan has been earning much attention of other countries, but that of China just earns much less attention. Other countries seem to be more interested in the international status and economic development level of China. In spite of being the educational center of China and possessing more than 70 key institutes of higher education, Beijing still attracts far less students than New Zealand which has fewer regular higher learning institutions. By the end of 2002, the number of Chinese students studying in New Zealand was amazing and reached 30, 000. France also hosted a successful higher educational fair in Beijing in 2000, while China did not start her educational fair overseas until 2002. China has already realized the importance of holding educational fairs overseas. The fairs held by China before also revealed the problems worthy of being considered. First, there are too few participants for the fairs. There are totally 1071 regular institutes of higher education in China, but only 30 of them were chosen for the fairs before. It is obvious that the 30 institutes are utterly inadequate and not able to represent the overall image of higher education of China. Second, the goal of export development of higher educational services of China seems not to be set up

carefully and reasonably. Australia and New Zealand themselves are countries that have excess supply of higher education. Therefore, in order to sustain the higher educational development, they have to go to other countries to recruit more students. What does China have to offer to compete with them?

### Conclusions

How to reduce the trade deficit in higher educational services, grasp the opportunity, and make better use of the advantages plays a crucial role in increasing Chinese higher educational export. The problems mentioned above can be solved through such measures as repositioning markets, promoting sales, running joint schools, and cultivating relevant markets. The measures are the factors that higher educational institutes need to take into consideration internally. Moreover, the higher educational trade is a project upon which the environment may have a strong impact easily. Consequently, the national policy support, economic support, as well as technological support for higher educational trade will have a big influence on development of such a trade. Therefore, it is suggested that China borrow ideas from countries with developed educational trade and then with which China can build up the framework of developing her own educational trade.

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