

The Diversification of China's Higher Education Funding  
1996-2003

by

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## ABSTRACT

China has adopted diversified funding mechanisms for its HEIs. This observation becomes the point of departure of the present research: the mismatch between the socialist state ideology and the diversified funding structure of higher education in China, which grants a greater share to non-government resources in financing HEIs. The research sets out to analyze the funding of China's higher education and the process of its diversification.

The first chapter is a brief introduction to China's higher education. The second chapter describes China's higher education reforms since later 1970s and presents the problem statement regarding the mismatch between State ideology and the funding patterns of HEIs.

In Chapter 3, four theoretical hypotheses are formulated to explain the above the mismatch. Human Capital Theory: by channeling money back into public institutions from non-government sectors, the State reduces its burden to finance higher education. Resource Dependence Theory: inadequate funding for institutions and competition formed an environment in which institutions' need to seek diverse resources from non-State actors. Mass Higher Education Theory: with mass higher education, only a diversified funding scheme can sustain the expanded higher education system because public finance alone is no longer sufficient. Social Constructivism: in the current global economy, China's diversified funding scheme for higher education is shaped by global norms reflecting broader patterns of higher education restructuring despite its political ideology.

Chapter 4 introduces the research methods and data of the study. The data used in this study covers the time period 1996-2003. It includes government policies and information about sources of funding for various types of HEIs. Chapter 5 reviewed China's tuition policy, *Action Plans 21 for the Rejuvenation of Education*, Project 211 and Project 985. The *Action Plans* emphasizes invigorating state economy by strengthening education.

Project 211 and Project 985 are focused on building a few elite HEIs. Chapter 6 shows that non-government expenditure became the largest funding source for HEIs replacing government budget expenditure in 1999, when the *Action Plans* was implemented. Data also shows that national regular HEIs are given funding priority as reflected in Project 211 and Project 985. In contradiction, local regular HEIs and their students remain underfunded.

In conclusion, Chapter 7 examines the four hypotheses over the backdrop of the findings. The first three theories dwell on domestic factors and fail to properly explain the mismatch between funding diversification and China's socialist ideology. Social Constructivism, with a focus on international factors, is able to account for the mismatch by claiming that global norms shape China's domestic policies and redefine the identity of the Chinese society. Chapter 8 provides insights regarding the implications of the study and reflections on future researches.

## TABLE OF CONTENTS

<b>Abstract .....</b>	<b>ii</b>
<b>Table of Contents .....</b>	<b>iv</b>
<b>List of Tables.....</b>	<b>vi</b>
<b>Acknowledgements .....</b>	<b>viii</b>
<b>List of Abbreviations.....</b>	<b>ix</b>
<b>Dedication.....</b>	<b>x</b>
<b>CHAPTER 1 INTRODUCTION .....</b>	<b>1</b>
<b>CHAPTER 2 PROBLEM STATEMENT.....</b>	<b>5</b>
History.....	5
Funding and Tuition Fee Reform.....	6
Administration and Internal Management Reform.....	7
<i>Minban</i> Higher Education- Privatization?.....	8
Internationalization.....	10
Problem Statement.....	12
<b>CHAPTER 3 THEORETICAL APPROACHES AND TENTATIVE</b>	
<b>HYPOTHESES.....</b>	<b>17</b>
Human Capital Theory.....	17
Human Capital and Education.....	17
Applying Human Capital Theory to China's Case.....	19
Resource Dependence Theory.....	21
Resource Dependence and Organizational Ecology.....	21
Applying Resource Dependence Theory to China's Case .....	25
Mass Higher Education Theory .....	26
Mass Higher Education and Post-Secondary Institutions.....	26
Applying Mass Higher Education Theory to China's Case .....	29
Social Constructivism .....	31
Social Constructivism and Global Norms.....	31
Applying Social Constructivism to China's Case.....	32
Summary.....	33

<b>CHAPTER 4 RESEARCH METHODS.....</b>	<b>35</b>
<b>CHAPTER 5 FUNDING POLICIES AND RESTRUCTURING OF HIGHER EDUCATION INSTITUTIONS IN THE PEOPLE'S REPUBLIC OF CHINA: A POLICY OVERVIEW.....</b>	<b>40</b>
Introduction.....	40
Tuition Policy (1998)-No More Free Higher Education.....	42
Project 211 (1995)-Building 100 Top Universities for the 21 <sup>st</sup> Century.....	44
Project 985-Creating World-Class Universities.....	47
<i>The Action Plans 21 for Rejuvenation of Education</i> (1999)- Blueprint for Cross- Century Educational Reform and Development in China.....	49
Summary.....	52
<b>CHAPTER 6 FUNDING CHINA'S HIGHER EDUCATION INSTITUTIONS, 1996-2003.....</b>	<b>54</b>
Introduction.....	54
Expenditure on Each Type of Institution by Sources of Funding.....	55
Expenditure from Each Funding Source for Higher Education by Type of Institutions.....	60
Summary.....	63
<b>CHAPTER 7 DISCUSSION AND CONCLUSIONS.....</b>	<b>87</b>
<b>CHAPTER 8 IMPLICATIONS AND REFLECTIONS ON FUTURE RESEARCH .....</b>	<b>97</b>
Implications of the Study .....	97
Reflections on Future Research.....	98
Concluding Statement.....	100
<b>REFERENCES.....</b>	<b>102</b>

## LIST OF TABLES

Table 1.1	Number of Undergraduate Students by Type of Institution.....	3
Table 1.2	Number of FTE Teaching Personnel by Type of Institution .....	4
Table 6.1	Total Expenditure on All HEIs by Source of Funding .....	66
Table 6.2	Total Expenditure per Student for all HEIs by Source of Funding.....	67
Table 6.3	Expenditure on All HEIs by Source of Funding as Percentage of Total Expenditure on All HEIs and Year to year % Change .....	68
Table 6.4	Expenditure on National Regular HEIs by Source of Funding .....	69
Table 6.5	Expenditure per Student on National Regular HEIs by Source of Funding .....	70
Table 6.6	Expenditure on National Regular HEIs by Sources of Funding as % of Total Expenditure on National Regular HEIs and Year to year % Change .....	71
Table 6.7	Expenditure on Local Regular HEIs by Source of Funding.....	72
Table 6.8	Expenditure per Student in Local Regular HEIs by Source of Funding .....	73
Table 6.9	Expenditure on Local Regular HEIs by Sources of funding as % of Total Expenditure on National Regular HEIs and Year to year % Change .....	74
Table 6.10	Expenditure on National Adult HEIs by Source of Funding .....	75
Table 6.11	Expenditure on National Adult HEIs by Sources of Funding as % of Total Expenditure on National Adult HEIs and Year to year % Change.....	76
Table 6.12	Expenditure on Local Adult HEIs by Sources of Funding.....	77
Table 6.13	Expenditure on Local Adult HEIs by Sources of Funding as % of Total Expenditure on National Adult HEIs and Year to year % Change.....	78
Table 6.14	Total Expenditure on Higher Education by Types of Institutions.....	79
Table 6.15	Total Expenditure on Different Types of Institutions as % of Total Expenditure on All HEIs and Year to year % Change.....	80
Table 6.16	Government Budget Expenditure on Higher Education by Types of Institutions.....	81
Table 6.17	Government Budget Expenditure on different types of Institutions as %	

	of Government Budgetary Expenditure on all HEIs and Year to year % Change.....	82
Table 6.18	Local Government Additional Expenditure on Higher Education by Types of Institutions.....	83
Table 6.19	Local Government Additional Expenditure on Different Types of Institutions as % of Government Budget Expenditure on All HEIs and Year to year % Change.....	84
Table 6.20	Non-Government Expenditure on Higher Education by types of Institutions.....	85
Table 6.21	Non-Government Expenditure on Different types of Institutions as % of Government Budget Expenditure on All HEIs and Year to year % Change.....	86

**Note:**

Tables 6.1-6.21 are placed at the end of Chapter 6, given their size.

Tables 6.1-6.13 present data referring to the sources of funding for HEIs. This data shows how funding from the three sources adds up to the total expenditure for each of the four categories of HEIs. Data on total funding and funding per student for regular HEIs is presented. Data on funding per student for adult HEIs is not available and not presented.

Tables 6.14-6.21 shows how each funding source (central, local, non-government) is distributed across the four categories of HEIs. This analysis will help understand the destination of each particular financial resource and whether there is a correspondence between change in a specific source of funding and the category of institutions it targets.

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## **List of Abbreviations**

CERNET: China Education and Research Network

RMB: *Ren Min Bi*. It is the Chinese currency unit, which is also called Yuan or Chinese Yuan. RMB100=12.37 US Dollars=14.45 Canadian Dollars=10.19 Euros. Based on the nominal exchange rate provided by Bank of Canada (November 27, 2006)

NRUC: National Regular University and College

PRC: People's Republic of China

MOE: Ministry of Education

SARS: Severe Acute Respiratory Syndrome

CEI: China Economic Information Network

GDP: Gross Domestic Product

GNP: Gross National Product

HEI: Higher Education Institution

OECD: the Organization for Economic Cooperation and Development

IMF: International Monetary Fund

WTO: World Trade Organization

## **DEDICATION**

*To My Parents, Family and Friends*

## CHAPTER 1

### INTRODUCTION

“After the founding of the People's Republic of China in 1949, governments and the Communist Party of China at various levels have attached more and more importance to the development of higher education. Particularly after the Third Plenary Session of the 11th Central Committee of the Chinese Communist Party, the reform and development of higher education have made significant achievements. A higher education system with various forms, which encompasses basically all branches of learning, combines both degree-education and non-degree education and integrates college education, undergraduate education and graduate education, has taken shape (China Education and Research Network [CERNET] 2001, Jan 01a).”

In the past decade, China's higher education has experienced very dramatic changes and development, including changes in funding mechanisms, administration, human resource management, curriculum and teaching (PRC MOE 2002, Vidovich et al.2007, Gu 2004). A distinctive mismatch that has appeared in this process is between the centralized socialist State structure and the diversified funding structure of higher education. This research aims to focus on this mismatch, between State ideology and current funding policies.

Economic globalization, market economy, urban unemployment, administrative decentralization, and the information technology are pushing China to re-examine its post-secondary institutions. While China's MOE is maintaining its direct control over the approximately 70 national universities, which compose the “key” HEIs in the country, most of the other central government ministries have surrendered their jurisdiction of

universities to provincial or municipal control. Over 400 institutions of higher education formerly under the authority of various central State ministries have been transferred to provincial or municipal education authorities. The average number of students in regular institutions of higher education was 3,112 in 1997, up from 1,919 in 1990. In 1990, about 80 percent of China's universities had less than 4,000 students, and about 60 percent had less than 3,000 students. By the year 2000, 612 colleges and universities in the country were consolidated into 250 HEIs. In line with Project 211's pledge to establish 100 world-class universities, institutions are now destined for higher standards and quality (Postiglione, 2001). Table 1.1 and Table 1.2 outline the major changes that took place in China's higher education between 1996 and 2003.

In 2003, the overall investment in post-secondary institutions grew to 150 billion RMB from 29 billion RMB in 1996. Over the same period the total expenditure in regular post-secondary education also increased to 142 billion RMB from 26 billion RMB. China adopted the approach broadly used in western countries: resources were pooled from diverse channels, private and public, despite a socialist State ideology, which emphasizes the centrality of State control and the free provision of state services, including in the field of education.

Indeed, the funding mechanisms for public HEIs in the People's Republic of China are changing rapidly from solely public (government) resources towards funding from various non-public sources. In National Regular Universities and Colleges' (NRUCs)

“non-government funding” has exceeded 50% of their total revenues since 1999. This diversification raises many challenges. China, with a socialist ideology and a centralized political structure, implemented funding diversification schemes for higher education in such a rapid speed and vast scale. How can this funding diversification be explained in relation to China’s socialist ideology? How did this diversification affect the funding schemes for different types of institutions? How does the diversification reconfigure the State’s commitment to higher education?

**Table 1.1: Number of Undergraduate Students by Type of Institution**

	<b>Regular</b>	<b>Adult</b>	<b>Total</b>
<b>1996</b>	3,021,100	945,200	3,966,300
<b>1997</b>	3,174,362	1,234,761	4,409,123
<b>1998</b>	3,408,764	1,208,056	4,616,820
<b>1999</b>	4,085,874	1,274,789	5,360,663
<b>2000</b>	5,560,900	1,117,700	6,678,600
<b>2001</b>	7,190,658	1,225,985	8,416,643
<b>2002</b>	9,033,631	5,591,573	14,625,204
<b>2003</b>	11,085,642	5,591,573	16,677,215
<b>Difference between 1996 and 2003 (%)</b>	8,064,542 (267%)	4,646,373 (492%)	12,710,915 (320%)

Note: Data of regular do not include the data of adult HEI. Data of adult HEIs are the same as 2002

Source: PRC MOE

**Table 1.2: Number of FTE Teaching Personnel by Type of Institution**

	<b>Regular</b>	<b>Adult</b>
<b>1996</b>	402,500	98,600
<b>1997</b>	404,471	100,265
<b>1998</b>	407,253	96,612
<b>1999</b>	425,682	97,644
<b>2000</b>	462,772	93,402
<b>2001</b>	531,910	87,978
<b>2002</b>	618,419	88,861
<b>2003</b>	724,658	88,861
<b>Difference between 1996 and 2003 (%)</b>	322,158 (80%)	-9739 (-1%)

Note: 1. Data of adult HEIs are the same as 2002

2. There was no data for Minban HEIs until 2002. There were 24,563 FTE teaching personnel in 2002 and 24,543 FTE teaching personnel in 2003.

Source: PRC MOE

## **CHAPTER 2:**

### **PROBLEM STATEMENT**

#### **History**

On October 1<sup>st</sup>, 1949, the People's Republic of China was founded on the socialist ideology that considers capitalism as incompatible with China's economy and society. As pointed out in Gu (2001) and Hao & Long (2000), within this context, HEIs were structured to train high-level professionals in specialized fields to fit into the labour force plans of the State. Funding for higher education was provided exclusively by the government and the cost of receiving higher education was fully subsidized by the State. A higher education system was established, in which institutions had very limited autonomy. They operated under the firm and complete control of the State (Li, 2000 p.38). During the 10 years known as the "Cultural Revolution" (1966-1976), higher education enrollment was reduced to below the 1949 level (Gu, 2001).

It was not until the mid 1980s that the situation began to change. Since then, China's higher education has changed in all aspects, including in terms of external administration, funding, recruitment and job-placement, internal management, teaching and curricula, internationalization, and even ownership of the institutions (CERNET 2001, Jan 01a; Huang, Qin & Wu, 1994). In the process of this vast reform, China has simulated higher education systems in many industrialized countries and also adopted many management

schemes, operation methods, curriculum designs, and funding mechanisms from countries like the United States and Canada. The reform of higher education finance and diversification of funding are particularly interesting in this respect. Bold measures were introduced including encouraging entrepreneurship in higher education and the creation of a wider role for the non-government sector to assume.

### **Funding and Tuition Fee Reform**

Worldwide, up to the 1980s public education used to be free. By the 1990s, this notion had been widely abandoned, not only because of fiscal stringency but also because of the realization that free tertiary education was in fact likely to be inequitable. According to Bray (1998), “Young people from richer socioeconomic groups are more likely than their counterparts from poorer socioeconomic groups to attend tertiary institutions, and subsidies for higher education are therefore more likely to benefit the rich than the poor”.

Regarding the funding system, as reflected in many publications (Du & Shen 2000, Huang 2001; CERNET 2001 Jan 01a; PRC MOE 2002), the old revenue pattern in which the funding of higher education depended solely on the governments had been reformed. A new system, capable of pooling resources from diverse channels, was gradually introduced and perfected. In addition to public allocations, universities are also getting budgetary allocations from social endowments, student tuition<sup>1</sup> and their own enterprises.

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<sup>1</sup> Higher education in China used to be free for students. The state subsidized all expenses to allow them to study. A tuition fee was fully implemented in most of the institutions from 1997 onward.



The university-owned enterprises and companies are based on the research achievements of the universities. Their business ranges from pharmacy, high technology, architecture, aviation, anti-counterfeit, to fashion design, covering almost all strands of industries. By their universities' expertise and reputation in these industries, university-owned enterprises are usually very successful and profitable. Employees are often professors and students.

According to Yang (2001), Zhang, He & Qiu (2003) and Li (Dec 2001), under the old system, when students did not pay their higher education tuition fees, they had to stay in the country to serve the society for a certain period of time. They would be placed into jobs by the government. Now that students are paying for their education, they tend to go into the labour market after graduation looking for the jobs they want. In the same vein, industries competitively recruit the talents they need. Hence, higher education and the labour market have become a "two-fold choice mechanism".

### **Administration and Internal Management Reform**

In term of administration, the old system -- in which the State was the single decision maker regarding the establishment of new HEIs -- has been replaced by a new system where society and individuals play an active role in the organization and development of HEIs. Literatures (CERNET 2001 Jan 01a; Cai, 1997; Chen, 2003) show that institutions run by social groups (e.g. individuals and enterprises) are fully encouraged. At the same

time, more power is delegated to the institutions providing them with the autonomy needed for decision-making, within the frame of the law. Many HEIs have established cooperative education entities in collaboration with enterprises. Funding for these entities is mainly provided by the enterprise partner. The partnership between enterprises and research institutions not only reinforces the relationship between HEIs and the society but also improves the institutions' enrollment capacity. Appointment and contract mechanisms are widely adopted among the institutions both for academic and administrative staff. According to Qi & Chen (2000) and The World Bank (1997), job responsibility, differential salaries and teaching and research achievements are emphasized.

### ***Minban* Higher Education: Privatization?**

Already in the 1990s, Bray (1998) predicted that the private sector is likely to thrive in many Asian countries, including China, in the first years of the 21st century. Indeed, one of the major breakthroughs in China's higher education reform is the emergence of private institutions. *Minban*, or people-run education, has developed significantly since 1990. The funding for *Minban* HEIs is wholly funded by non-public sources, primarily students' tuition fees. Therefore, it is not part of public funding. It represents, undoubtedly, a major move in attracting more private investments into the higher education system as a whole.

According to CERNET (2001, April 11), the development of China's *Minban* education experienced four stages: (1) The "exploration stage" (1978-1987) which saw the very limited re-establishment of HEIs following the cultural revolution. (2) The "steady development" stage (1987-1991) which was marked by a gradual expansion of non-governmental HEIs. (3) the "rapid development" stage (1992-1999) which witnessed the emergence of *Minban* institutions, encouraged by the government. (4) The "supplement to equal" stage (1999-present) in which private HEIs were recognized as an equal provider of education and as competitors with public institutions.

In 1949, when the People's Republic of China was founded, there were about 220 *Minban* universities and colleges. These represented 89% of all the HEIs and were all turned into public institutions during the 1950s. It was not until the early 1980s that *Minban* higher education started again. The year 1995 was a landmark for China's *Minban* higher education, when the total number of institutions reached 1209 and represented about 33.9% of all the post-secondary institutions in the country. In 1995, China's Education Law was also promulgated, with the twenty-five articles reconfirming that the State would give full support to enterprises, social forces, local communities and individuals to establish schools under the legal framework of the People's Republic of China (PRC State Education Commission, 1995). On October 1, 1997, the State Council officially enacted the Regulations on the Social Forces Running Educational Establishments, which put the governance of private higher education on a formal basis.

True, public higher education still dominates the system and private institutions are nowhere close to their public counterparts in terms of numbers, enrollments, scales, teaching and research capacities, and accessible resources. Yet, frankly, the potential and speed in which private institutions' expanded cannot be underestimated. *Minban* institutions helped China reduce the pressure of increasing demand for higher education. They also helped China draw more private funding into the higher education system (CERNET, 2001, April 11).

### **Internationalization**

China's higher education has also become very active in the field of international cooperation and exchange. In the past two decades (1980s-2000s), China has established educational cooperatives and exchange relationships with over 150 countries and regions. Over 700,000 students were sent to study in over 100 countries. China also received foreign students from 160 countries and regions, sent thousands of teachers and experts abroad and employed foreign teachers and experts. This has not only benefited teaching and research but also a means of attracting foreign capital into the universities and facilitated knowledge exchange between Chinese institutions and top universities and research entities in other parts of the world (PRC MOE February 16, 2003). Recently, the Chinese government adopted a policy to encourage the overseas students to come back and serve the country in various ways. According to Peking University News (Thursday

2005-11-10) up to 2003, students who have returned from overseas have established over 5,000 successful enterprises.

Statistics published by China's MOE indicate that from 1978 to 2003, of the 700,200 Chinese students in foreign universities, over 170,000 have returned to China. There were about 360,000 students currently studying or engaged in research overseas. In one year only, in 2003, China sent 117,300 students abroad, among whom 3,002 were funded by the government, 5,144 by their employers, and 109,200 self-funded. The number of students was actually 6.3% lower than the previous year due to the spread of Severe Acute Respiratory Syndrome (SARS) epidemic. Self-funded students were the most affected, but the number of government and employer-funded students remained the same. The year 2003 also witnessed the highest number of returning students, over 20,000 for the first time. Among them, 2638 were government-funded, 4292 were employer-funded and 13,200 were self-funded. The increase occurred not only in self-funded students (an increase of 15% over 2002) but also in government and employer-funded students (an increase of 7.4% over 2002) (PRC MOE, Feb 2004).

Many students returned after graduation to work in China but the returning rate was still only about 1 out of 4 overseas students. Although half of the students were yet to graduate, about half of the students who had finished their degree stayed in foreign countries for their future career. This included those funded by the government and by their employers. Therefore, China was not able to benefit from all of its investments, part of which

actually went into foreign countries. Besides, students returning from abroad were not distributed equally in different regions of China. Most of them stayed in China's economically more established east, south, and coastal areas. The Chinese government implemented a specific policy to address this problem and encourage people with overseas experience to go to the less industrialized western and interior regions of the country. Over the past five years, the policy has successfully helped the western areas to attract more human resources than ever (CEI 2006).

### **Problem Statement**

With the establishment of the "Socialist Market Economy," China has started to reform education, and in particular higher education, in an attempt to restructure its economic performance in a globalizing economy. What impacts will China's higher education funding reform have on its own system given its socialist State structure? Will China be able to maintain the integrity of the socialist identity of its public institutions? There are other challenges too, for example the inequity in distribution of the resources in different areas, institutions and levels of education. However, the most challenging is the apparent mismatch between China's socialism political ideology and the diversified funding scheme for its higher education, which grants greater leverage to non-government sources in funding HEIs.

The present research draws on theories of higher education expansion in an attempt to

account for the tensions between State ideology and economic reforms in higher education as evident in China's case. Four theories will be drawn upon: Human Capital Theory, Resource Dependence Theory, Mass Higher Education Theory, and Social Constructivism. It seems that these theories of higher education, originating in the western experience of higher education, pose some difficulties when applied to China. Hence, a major challenge of the present research is to explore the goodness-of-fit between these theories in explaining China's higher education finance diversification and why it occurred the way it did.

Four theories are potentially helpful in examining China's higher education finance and restructuring: Human Capital Theory, Resource Dependence Theory, Mass Higher Education Theory, and Social Constructivism. Each theory addresses one or more aspects of the mismatch between higher education financial scheme and China's political ideology. Four hypotheses are constructed with the aim to identify the theoretical lens that would best explain the processes associated with the financial restructuring of China's higher education system in the 21<sup>st</sup> Century.

The four theories were each chosen for specific reasons. Human capital has been emphasized repeatedly by China's government announcements, higher education policies, and research literatures as a key factor for economic development and national modernization. Quite clearly there is a general consensus among the policy makers and researchers that the Human Capital Theory represents an important theoretical lens

through which funding diversification can be approached. Human Capital Theory builds on the State's need for human resources and how investment in education can be turned into economic growth.

One of the reasons why the Chinese government implemented the diversified funding policy for the postsecondary institutions was to insure sufficient finance from all possible sources needed for the development of the institutions. Therefore, the Resource Dependence Theory can help look at China's higher education funding reform. With an emphasis on the organizational and management perspective, Resource Dependence Theory addresses the institution's internal need for more resources to expand as well as the relationship between institutions and their surrounding environment.

In recent years, higher education enrollment expansion has been a major strategy in China's attempt to improve the quality of its human resources. According to Gu (June 2004) by encouraging institutions to expand their recruitment quota, Chinese government expects to increase the number of highly qualified personnel with postsecondary education credentials. It also marked the milestone of China's entry into the mass higher education era in 2003 when the national enrollment rate reached 17% of the age cohort. With this decisive change in the scale of China's higher education, the Mass Higher Education Theory simply cannot be disregarded when examining the financial aspect of China's higher education. From the societal point of view, Mass Higher Education Theory looks at enrollment expansion accompanying the economic and population



growth of one country as prerequisite for more funds to be spent on higher education.

Evidently, the above three theories dwell on the domestic issues and factors including need for human capital, constraint of financial resources and enrollment expansion. However, international influences, associated with the global economy, are extremely powerful as well. In the current global economic environment, exchanges between different countries and regions are increasingly frequent. These include exchanges of traditional commodities, information and technologies, human resources as well as education and government policies. In order to thrive in the intense international competition, every country and region must also learn from the successful experiences from others. Therefore, the Social Constructivism can help understand how international factors impacted China's higher education finance. Social constructivism emphasizes the importance of culture and context in understanding what occurs in society and constructing knowledge based on this understanding. One strand of Constructivism associated with international relations tradition focuses on shared ideas in the international structure that shape State identity and interests (Ruggie 1998, p.17). From a Social Constructivist perspective, one country's government policies are largely shaped by global norms, which may in turn affect the State ideology and structure.

In summary, these four theories can look at the mismatch between China's socialist State ideology and funding diversification for higher education. Human Capital Theory builds on the State's need for human resources and how investment in education can turn into

economic growth. Resource Dependence Theory emphasizes the organizational perspective and addresses universities' need for more resources to grow. Mass Higher Education Theory, from the societal point of view, looks at funding diversification process as the result of one country's economic and population growth. Social Constructivism focuses on the international factors impacting China's higher education finance and State policies.

## **CHAPTER 3**

### **THEOTRICAL APPROACHES AND TENTATIVE HYPOTHESES**

#### **Human Capital Theory**

##### **Human Capital and Education**

According to Fitzsimons (1999), Human Capital Theory is the most influential economic theory of Western education, setting the framework of government policies since the early 1960's. It is seen increasingly as a key determinant of economic performance. In terms of structural reform, under Human Capital Theory, the basis for national policy frameworks is the enhancement of labour flexibility through regulatory reform in the labour market, as well as raising skill levels by additional investment in education, training and employment schemes, and immigration focused on attracting high-quality human capital. According to Quiggin (1999, p. 2), Human Capital Theory approaches schooling as providing students with information and skills that will be valuable in their later life. As with other investments, a sacrifice of current income (the goods and services that teachers and students could produce if they were not engaged in education) is accepted in order to generate monetary and non-monetary returns in the future. In narrow versions of Human Capital Theory, knowledge and skills contribute to increased productivity and hence, other things being equal, to higher earnings. However, a broader definition may be given to Human Capital Theory, which encompasses learning that does

not contribute to monetary returns. For example, knowledge of and ability to appreciate arts provides a future implication not reflected in market earnings. However, because monetary returns are easier to measure, most empirical studies have focused on monetary returns rather than on broader definitions of the benefits of education

Under Human Capital Theory, education is an investment that produces future benefits. Therefore cuts in education spending will reduce future national income. The key concept behind this approach is that human being is a type of capital. According to Rao & Datta, (1988) and Phillips (2005), within the context of education, Human Capital Theory claims that earnings differentials among individuals reflect their productivity differentials that are determined by the level of investment in education. Thus there is a link between education, productivity and earnings. In turn there is also a link between the amount of education possessed by the labour force and GNP growth

Mincer (1958) argues that the implication of Human Capital Theory is that public and private expenditure on education should be expanded to the point where the present value of the stream of returns to marginal investments is equal to the cost. The stream of returns includes both increased earnings and the non-pecuniary benefits of education. Furthermore, according to Schultz (1981, p. 59), the level of educational expenditure, as a share of Gross Domestic Product (GDP), should increase over time, provided that capital and technical knowledge can be substitutes for unskilled and semi-skilled labour and complements to the highly educated labour.

Human Capital Theory has been used to account for national economic growth. However, according to Blaug (1987), public expenditure on post-secondary education depends not only on the costs of instruction but also on the volume of direct aid to students. Furthermore, the levels of public spending on student aid can influence individual's demand for post-secondary education but cannot directly affect levels of economic development.

### **Applying Human Capital Theory to China's Case**

It appears that China's reform policy is in line with Human Capital Theory. China's government wants to invest more in higher education because the investment will lead to higher national productivity and increased GDP in the longer run. Why didn't the State choose to only increase the public expenditure on higher education instead of diversifying the funding resources available to the institutions? Is it because the increase in public expenditure on higher education has become too expensive for the State?

It is important to note that China has a history of recognizing credentials achieved by different levels of examination. Education has long been viewed as a means to better one's life (Hao & Long 2000). The belief in education as capital one possesses is deeply rooted in the Chinese culture. Therefore, people in China are also willing to pay more for a higher level and longer period of education (Rao & Datta, 1988, p. 203).

According to St John (2003) and OECD (2003), under Human Capital Theory, human

capital involves shared investments and shared returns by the State, the employers and the employees. The State encourages more funding from non-public resources in order to reduce the net investments from public expenditure on higher education. It also takes advantage of people's willingness to pay for their education and pushes to mobilize more funds for higher education directly from individuals. The more funding from non-public avenues, the less costs of higher education will be carried by the State. The employers and employees are also made to pay for the future returns they may receive from the investment in education. China's funding reform for higher education enables the State to make use of more resources, which are in the hands of the private sector (such as private corporations, social foundations and individuals).

Applying Human Capital Theory to China's case would lead us to the following hypothesis: despite appearing as a decentralization of financial resources, funding diversification enables the State to re-centralize its hold over some of the resources that were not under its control and which are now held by private enterprises and individual households. These are now requested to invest in public higher education as a "People's" enterprise, which is fully in line with a socialist approach. From this perspective, the apparent mismatch between China's socialist political system and decentralization of higher education funding is not a mismatch at all. Rather, the government is merely pulling more non-public resources into a redefined public sector of education.

This said, the theory does not provide an answer to possible changes to the socialist

ideology of the State. Even though the State continues to maintain its economic centralism and collectivism, the effect of such a policy may still be consequential to its social and political legitimacy.

## **Resource Dependence Theory**

### **Resource Dependence and Organizational Ecology**

Resource Dependence Theory seeks to explain organizational and inter-organizational behavior in terms of the critical resources that an organization must have in order to survive and function. Johnson (1995, p. 1) states that “as an open-systems theory, the resource dependence argument suggests that a given organization will respond to and become dependent on those organizations or entities in its environment that control resources which are both critical to its operations and over which it has limited control”. According to Pfeffer & Salancik (2003), Resource Dependence Theory focuses on resources, including the flow/exchange of resources between organizations, the dependency and power discrepancy created by unequal resource exchanges, the constraining effects such dependence has on organization’s actions, and the efforts by the organization’s leaders to manage such dependence. Moreover, according to these same authors, Resource Dependence Theory assumes that organizational behavior and structure are shaped primarily by external materialistic forces. Cultural, ideological and institutional factors and considerations are absent in this theory.

An organization's needs for resources and the subsequent dependence resulting from this need create problems for its leaders/managers. Johnson (1995 p. 3) argues that “[g]iven that no one organization is self-sufficient, organizations are forced to enter into exchange relations with the other actors, entities, and organizations in their environments”. The exchange relationships may be multi-dimensional. Johnson (1995, p. 5) further observes, “while all organizations enter into exchange relationships, the number of transaction partners varies both across organizations and within a given organization over time”. Depending on the resource needs of the main organization and the following exchange balance, the relationship between the main organization and the resource provider can be dependent, mutual or dominant. As a result of the external constraints, the choices and actions of the main organization are constrained to some extent as its leaders/managers seek to attend to the demands of those external entities that provide resources crucial to the organization’s survival and success. According to Johnson (1995, p. 7), there are three principles guiding an organization to adapt and negotiate with the external resource providers: 1) to ensure the continual survival and success of the organization; 2) to reduce the effects that external constraints have on internal organizational discretion; and 3) to maximize their autonomy and discretion in order to enhance both present and future adaptability.

Johnson (1995) indicates that there are two major categories of strategies that organizations use to deal with resource dependence relationship: buffering and bridging.



“Buffering involves amplifying and protecting organizational boundaries....Bridging involves modifying organizational boundaries through boundary-spanning or boundary-shifting” (Johnson 1995, p. 13). Johnson (1995) also mentions that, organizations can try to partially reduce resource dependence through cooperation, via joint ventures, contracting, the movement of executives and other personnel across the organizations, and resource diversification. They can also attempt to reduce the dependence more completely through mergers, officer/directorate interlocks or co-operation. The distribution of power within the organization is a critical factor in determining the adaptive strategies pursued by an organization. Over time, power accumulates to those leaders/managers and sub-units who prove proficient at reducing the dependencies, uncertainties, and contingencies accompanying the flow of critical resources. The process of funding diversification can be seen as a coping strategy in light of the inadequate resources, in which leaders undertake strategies such as amplifying boundary, joint ventures, and resource diversifications (Pfeffer & Salancik, 2003, pp. 37 & 127).

If Resource Dependency Theory approaches organizations as living systems, the surrounding environmental conditions have a critical role to their survival. According to Morgan (1997), the source of ideas for thinking about organizations under this metaphor is very much similar to biology: adaptation, life cycles, recycling, needs, evolution, survival of the fittest, health, and illness. Much importance was attached to organizations

that are able to innovate and evolve to meet the challenges of the changing environment. Under this metaphor, it is believed that the management of organization can be improved through systematic attention to satisfying the “needs” of the organization to survive and succeed. The focus on the “needs” also encourages us to see the interacting processes that have to be balanced within the organizations as well as those in relation to their external environments. Resource Dependence Theory is speaking directly to the relation between organizations and their surrounding ecology.

Under the Resource Dependence Theory, higher education finance shifts to those funding sources that reflect a market base. For instance, academic capitalism augments the resources available to an organization. The entrepreneurial work of an organization is viewed as an extension of the research, which they were traditionally engaged in (Slaughter & Leslie, 1997). According to the Resource Dependence Theory, organizations survive to the extent that they are effective in acquiring and maintaining resources (Pfeffer and Salancik, 2003, p.3). According to Pfeffer & Salancik (2003, p.196), institutions confronted with reduction in public moneys and increased competition for resources seek will ease resource dependence difficulties by winning non-public finances. Resource Dependence Theory predicts that individuals, central administrators, and research institution to develop strategies that would generate the greatest amount of resources for the institutions. To ensure a position of social legitimacy and political acceptance, institutions are dependent on their environment. The State acts

to ensure that universities follow market principles in such a way that they minimize the difficulties rooted in resource dependency, which means implementing funding diversification policy to insure sufficient resources for institutions.

### **Applying Resource Dependence Theory to China's Case**

Due to China's large population and very limited educational resources, decision makers are highly constrained in finding new resources to fund a dynamically expanding higher education system. While no longer capable of providing sufficient funding for institutions, the State shifts to allow "academic capitalism" (Slaughter & Leslie 1997) within higher institutions to maintain research (and other) resources. While it is impossible to sustain their existence and development with the reduced funding available from public resources, the institutions are now expanding their revenue sources and seeking to ensure non-public finances. Under this explanation, the State acts to bring market principles into universities to minimize the difficulties rooted in the dependency on public funding. University administrators develop buffering and bridging strategies such as joint ventures, resource diversification, merger, and co-operation to generate the greatest amount of resources for the institutions. Entrepreneurial work is viewed as an extension of the research in which individuals were traditionally engaged in institutional settings.

Although the theory does not account for the mismatch between China's centralized political structure and the recent appearance of a decentralized funding approach for

higher education, it confirms the occurrence of such a mismatch. Because of the inadequacy of public funding, the Chinese State diversifies funding resources for higher education to reduce the intuitions' dependency on public resources. In the process of adapting to insufficient revenue from the government, as well as adjusting to the new environment of market economy, the financial reform of higher education turns out to be discrepant with China's political structure. In fact, the market economy and reformed higher education system are part of the environment in which the political system exists. According to the Resource Dependency Theory, once the State structure cannot function properly in its environment, it will have to change by adaptation. From a Resource Dependence perspective, the reason for the current existence of the mismatch between China's higher education finance and State ideology can be that the inconsistency has not yet reached a "tipping point" which leads the State structure to change fundamentally in order to adapt to the environment.

This said, Resource Dependence Theory does imply that the changes of the external environment may eventually lead to the change in the nature of the State structure and ideology. Yet, this approach does not clarify the attributes that such a change may arrive.

### **Mass Higher Education Theory**

#### **Mass Higher Education and Post-Secondary Institutions**

Trow (1973) argues that the development of higher education in every advanced society

will go from elite higher education to mass higher education and subsequently to universal higher education. Mass higher education differs from elite higher education not only quantitatively but also qualitatively. The differences between elite and mass higher education are fundamental and underlie all aspects of higher education. They differ in the proportion of the age group enrolled in the institutions but they also differ in the many other ways: such as the nature of institutional boundaries and the patterns of institutional administrations and governance.

According to Trow (1973, pp. 2-7), elite higher education system starts to change its characters fundamentally when the total enrollment reaches 15% of the age group. And when 50% of the age group are enrolled in the higher education system, which means that a large proportion of the population is sending their children to receive some type of higher education, the system is moving rapidly toward universal participation. When access to higher education is highly limited, it is viewed as a privilege for the elite. In the stage of mass higher education, access is a right for those who have certain formal qualifications. In the stage of universal access, higher education is becoming more and more an obligation for each individual.

According to Scott (1995, p.86), when higher education enters into the stage of mass higher education, there are major impacts in two areas: the control exercised by the government over universities and colleges; and the funding of these institutions. In the former area, there is a trend towards administrative devolution; and in the latter, there is a

trend away from total dependence on State funding. There are also considerable changes in the ways in which State funds are allocated. State universities will acquire more operational and entrepreneurial freedom, as their relationship with their government shifts from absolute ownership to deliver specified contracts. In other words, when the universities are no longer directly run by the government, they will have more decision-making autonomy.

According to Barr (2005), one of the distinctive features of mass higher education is that universities become a part of a much broader knowledge industries. The importance of targeted and special purpose funding increases and the centrality of general-purpose government block funding declines. The universities transform from collegial into bureaucratic entities. Mass higher education requires a funding system by which institutions can charge different prices to reflect their different costs and missions.

According to Scott (1995, p. 89), after entering the mass higher education stage, the increased non-public funding for institutions represents a more balanced partnership between public and private income and eventually the latter will partially substitute the former. Consequently, if the burden of financing higher education on the State is to be reduced, students themselves must make a direct and more substantial contribution to the cost of their education. There are two strategies available to introduce user payment into the mainstream: first is a special graduate tax and second is to charge students directly for tuition but to establish a loans scheme, which has the best working example in Australia.

### **Applying Mass Higher Education Theory to China's Case**

The Chinese State has been seeking to achieve mass higher education in the early decades of the 21<sup>st</sup> century. As a result of the State's efforts, large cities (Beijing and Shanghai) have first accomplished the goal of mass higher education with an enrollment of over 50% of the population aged 18 to 22 (China Youth Daily, 2004). The total higher education enrollment of China reached 17% of the age cohort 18-22 in 2003 for the first time in its history. This indicates that, according to Mass Higher Education Theory, the characteristics of its higher education system have started to change.

The Chinese State controls higher education finance, from the implementation of tuition fees to the introduction funding from various sources for institutions. In China, tuition fees, introduced in 1997, vary to some extent according to HEIs, different geographic regions, and subjects studied. Simultaneously, merit-based scholarships and grants were created for outstanding students. Given the fundamental principle stated in the Chinese Constitution -- "all citizens should enjoy the equal right of receiving education" -- tuition fees may prevent some students from economically less established areas and poorer families from pursuing university studies. Bursaries, student loans, part-time jobs and other financial assistance schemes have been introduced to help students with financial difficulties (CERNET 2001, Jan 01a).

Under the Mass Higher Education Theory, the hypothesis would be that once China's

higher education entered the phase of mass higher education, the enrollment would have exceeded 15% of the age cohort 18-22. In order to satisfy the need of quality higher education for a large population, HEIs need to shift to an industrial or entrepreneurial mode, which draws moneys from various sources. No matter what the State structure is, the centralized government funding would have to give way to targeted funding from diverse benefactors. Only in this way can the funding mechanism sustain the mass higher education system. Therefore, under this hypothesis, the mismatch between the centralized political system and the de-centralized funding mechanism in higher education has occurred in China. However, funding diversification is only one of the basic solutions to the problem of enrollment expansion. There are other necessary measures, such as quality assessment, to be taken in order to maintain the quality of a mass postsecondary education system. Mass Higher Education Theory does not provide an interpretation as to what may be the influences of such a trend on the socio-economic structure as well as State ideology of a country. Although the changes occurred in the financial system, what are the impacts they may have in turn on the State structure and ideology?

## **Social Constructivism**

### **Social Constructivism and Global Norms**

One strand of Constructivism focuses on shared ideas in international relations, which shape State identity and interests (Ruggie 1998, p. 17). Wendt (1999, p. 1) points out that



there are two major tenets of Constructivism increasingly accepted by the scholars in international politics: 1) the structure of human association is determined primarily by shared ideas rather material forces, and 2) the identities and interests of purposive player are constructed by these shared ideas rather than given by nature. The first perspective emphasizes the sharing of ideas and the second emphasizes the emergent powers of social structures.

According to Chan-Tiberghien (2004, p. 14), another strand of Constructivism emerging out of sociology argues that properties of institutions and nation-states are determined by the larger world culture and society, made up of international organizations, NGOs, professional associations, and academia. These carriers of international norms provide the definition, discourse, and models for global organization around principles of individualism, universalism, progress, and world citizenship. These principles are globally legitimized despite their origins even if their specific contents might be contested. Models built around these principles help nation-states to construct modern national identities. Constructivism, however, does not clarify what actually happens in reality for nation-states to adopt similar norms. Norms of international society may create similar structures and push governments toward similar policy-making decisions, but the body of international norms is not completely harmonious. It is the tension and contradiction within the norms that leaves room for different solutions and different arrangements, each of which makes legitimacy claims based on the same norms. In turn,

compromises must be made to reflect the local cultures and customs with which international norms have had to negotiate (Chan-Tiberghien, 2004, p.17). In this particular study, global norms of higher education reform can be negotiated to adapt to China's specific socio-political environment and still maintain legitimacy.

### **Applying Social Constructivism to China's Case**

According to the Organization for Economic Cooperation and Development (OECD) (2003, p.76) *Education Policy Analysis 2003*, markets and competition are increasingly shaping higher education although higher education in many countries can still be viewed primarily as part of the public sector, where the government has a predominant role. Higher education is moving towards a new system of governance. Most OECD countries now allocate funds to universities on a block grant basis instead of detailed itemization of budgets. There have been clear moves toward introducing and increasing tuition fees, output-orientated budget allocation and performance contracting systems. Another noticeable trend in higher education funding is the government encouraging institutions to sell teaching and research services. Another aspect of funding diversification is direct financing by "third parties," such as industry and private foundations. The increasing dependence on "third party funding" may alter the balance of higher education resources towards those activities where the commercial possibilities are greatest. With the broad spectrum of OECD member countries, I believe that these trends and reforms in higher education can be looked at as norm setting.

It may be argued that these norms in higher education financial reform are globally legitimized and provide the theories, discourses, and models for the Chinese State to make similar decisions such as funding diversification for higher education. According to the claim of the Social Constructivist approach, it is the world culture and global norms that shape the property of the Chinese State but not the socialist ideology that shapes the nature of the policies taken by the Chinese government. There is also room for the Chinese State to adapt these norms to the country's specific environment and culture. The methods of funding diversification are compromised and negotiated to suit China's local politics. Therefore, under Social Constructivism, I hypothesize that no fundamental mismatch actually exists between the diversified funding scheme and the political ideology of the State because the tension and contradiction within the norms give room for compromises to be made to reflect the local cultures and customs of China. This approach also predicts that the new world culture and global norms that have shaped the new policies of China may in turn redefine the identity of the Chinese society.

### **Summary**

The four theories reviewed above led to four sometimes-overlapping hypotheses that account for the discrepancy between China's socialist centralized political system and its diversified funding scheme for HEIs.

Under the Human Capital Theory, China's decentralized financial scheme is essentially a

means of centralized government control over more resources that were not originally part of the public expenditure. The Resource Dependence Theory's view on the relationship between the organization and its environment tells that it is the lack of sufficient funding from public resources that lead the Chinese post-secondary institutions to seek non-public avenues for finance. It also explains the current mismatch between the State structure and higher education funding methods as the general environment has not yet developed to an extent when the government structure can no longer function properly thus it has not been necessary for the State structure to change. According to the Mass Higher Education Theory, the institutions will have to take on a diverse funding system to satisfy the need of 15% of the age cohort to receive higher education. This shift is not affected by the political structure in China. Finally, according to Social Constructivism, there is no fundamental mismatch between State ideology and funding mechanisms because funding diversification is articulated as a global norm that has influenced many countries' policies despite their political ideology. This approach also contends that the global norms, which shaped the policies, may change the ideology of the country in the future.

The above four scenarios could explain one or several aspects of the discrepancy between the State structure and ideology and the increasingly diversified funding for higher education in China. In the following chapters, these theory driven-hypotheses will be subject to an empirical study to determine their relevance and adequacy.

## **CHAPTER 4:**

### **RESEARCH METHODS**

To explore the four hypotheses formulated in the preceding chapter, the present study undertakes a policy study (Chapter 5) and fiscal study (Chapter 6). It analyzes the public funding for NRUCs in China. The national universities and colleges are the backbone of China's higher education system, which have always received the greatest public support from the government. The development of these institutions has been relatively consistent in terms of funding, research and teaching. They are also the institutions with the most prestige as well as autonomy in the country. The present study examines changes in public investment in these universities and in colleges. The trends and changes in the expenditures on higher education and revenue structure of public HEIs are also examined. At the same time, innovations and strategies for financial reform (such as tuition reform) are discussed.

To examine the four hypotheses, a time series of documents and statistical data published by the Popular Republic of China's MOE, the Ministry of Statistics as well by higher education research centers has been compiled. The data collection focuses on the public expenditure in national regular colleges and universities by central as well as local (provincial or municipal) governments. Data on the public funding for other levels of HEIs is also used for comparative purposes. The public funding for national colleges and

universities is compared with Gross National Product (GNP), total public expenditure on higher education and education, and total public expenditures of central and local governments in these areas. The study also uses research literature, policy publications, government announcements, policy reports and internal reports published by various State agencies.

Definition: for the purpose of this study, higher education institutions (HEIs) are categorized into regular HEIs and adult HEIs by age cohort of the student enrolled and national HEIs and local HEIs by level of administration.

The presentation of the findings is organized as follows:

First, in chapter 5, an analysis chapter reviews government higher education policies regarding reform and funding over the period from 1996 to 2003. This chapter examines the policies and their implications for higher education in China. The major education policies to be reviewed are the tuition policy, Project 211, the Project 985 and the *Action Plans 21 for Rejuvenation of Education*.

Next, in chapter 6, a time series of statistical data will be presented in an attempt to retrace the major changes, which occurred in the funding of Chinese HEIs. In presenting the data, HEIs are aggregated into four nominal categories:

1. National Regular HEIs: This category includes formal HEIs that are under the

administration of central (federal) government ministries.

2. Local Regular HEIs: This category includes formal HEIs that are under the administration of provincial or municipal government.
3. National Adult HEIs: This category includes HEIs that are under the administration of central government ministries and enroll adult students who are not admitted through the national entrance examination.
4. Local Adult HEIs: This category includes HEIs that are under the administration of provincial or municipal government and enroll adult students who are not admitted through the national entrance examination.

For each year between 1996 and 2003, three funding sources are also identified and analyzed:

1. Government Budget Expenditure: expenditure on higher education from central government ministries' appropriation and that from provincial and municipal government (taxation income).
2. Local Government Additional Expenditure: expenditure on higher education from Addition Educational Fees charged to citizens, which is collected mainly by municipal government. The major purpose of the additional expenditure is to support primary and secondary education.
3. Non-Government Expenditure: expenditure on higher education from non-government sources, including tuition fees, institution-run business, donation,

social organizations, private corporations etc.

Two series of data are used. The first series of data refers to the sources of funding for each of the four categories of HEIs described above. This data shows how funding from the three sources constitute the total expenditure of each particular type of HEI.

The second series of data used in the present study shows how each funding source (central, local, non-government) is distributed across the four HEIs categories. This analysis will help understand the destination of each particular financial resource and whether there is a correspondence between change in a specific source of funding and the category of institutions it targets.

The data has several limitations. This includes the lack of number of students for adult institutions, so there is no illustration of funding per student for adult institutions. No comparison between regular institutions and adult institutions can be generated for the same reason. Consistent statistical data is only available from 1996 onwards. All funding figures are in actual RMB.

The statistical data used in this study was published in:

1. PRC MOE, Department of Development and Planning. (1990-2003). *Educational Statistics Yearbook of China (Zhong Guo Jiao Yu Shi Ye Tong Ji Nian Jian)*. Beijing: People's Education Press
2. PRC National Bureau of Statistics. (1993-2000). *Statistical Yearbook of China*.



Beijing: National Bureau of Statistics

3. PRC MOE (2002). *Basic Statistics of Regular Schools in China by Level & Type*. Retrieved September 21 2004, from [http://www.moe.gov.cn/stat/tjgongbao/report\\_2002.xls](http://www.moe.gov.cn/stat/tjgongbao/report_2002.xls)
4. PRC MOE. (1995-2004). *Statistical Communiqué for China's Educational Development 1995-2003 (Quan Guo Jiao Yu Shi Jie Fa Zhan Tong Ji Gong Bao)*. Retrieved Dec 12 2004 from <http://moe.edu.cn/edoas/website18/info5515.htm>

**CHAPTER 5:**  
**FUNDING POLICIES AND THE RESTRUCTURING OF HIGHER EDUCATION**  
**INSTITUTIONS IN THE PEOPLE'S REPUBLIC OF CHINA:**

**A POLICY OVERVIEW**

**Introduction**

In the present chapter, government policies that drive the higher education reform over the period from 1996 to 2003 is outlined. This chapter reviews the funding policies and their implications for China's higher education.

According to Huang (2005, p.1), "the development of China's higher education since the later 1990s presents two striking characteristics: qualitative enhancement and quantitative growth". The period 1996-2003 witnessed the most comprehensive reforms introduced into China's higher education system. Many groundbreaking policies and milestone projects were implemented during these eight years. These include the introduction of tuition, Project 211, Project 985 and *Action Plans 21 for the Rejuvenation of Education*. The Chinese government granted funding priority to its top universities since 1995, when it launched Project 211. The latter opened the way for universities across the country to make strategic bids for acceptance among China's top 100 institutions and be funded to reach world-class standards in the 21st century. The name

Project 211 means 21<sup>st</sup> century and 100 universities. Later on, at Peking University's centenary in May 1998, the 985 World-Class University Project<sup>2</sup> was launched, which continues to concentrate high-level funding on a much smaller number of top universities. By implementing these national higher education projects, the central government aims to build up a few selected internationally recognized universities and also to enhance the quality of teaching and research activities by merging institutions (Jiang 1998; Hayhoe & Pan, 2005).

It is also in the late 1990s that the government was exerting great efforts to expand higher education, primarily by increasing enrolment in the existing public sector. In addition, it encouraged the growth of private sector and institutions in cooperation with foreign partners (Huang, 2005). In 1998, the former State Education Committee was officially named the MOE, which also encompasses higher education. The Higher Education Law was implemented on September 1<sup>st</sup> 1998, marking the completion of China's education legislation. It is also in 1998 that the largest university in China, Zhejiang University, came into being following the merger of four different institutions, namely Zhejiang University, Hangzhou University, Zhejiang Agricultural University and Zhejiang Medical University. All four were located in the garden city of Hangzhou. The founding of the new Zhejiang University was a significant move in the reform and development of China's higher education. The four universities emerged out of the same

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<sup>2</sup> The Project's name means year 1998 (98), followed by the month of May (5), hence 985.

tradition, the *Qiusi* (meaning "seeking the truth" in Chinese) Academy. This Academy was founded a century ago, as one of the earliest institutions of higher learning in China. Now they were merged back together to form one of the country's leading comprehensive institutions (Hayhoe & Pan, 2005).

In February of 1999, China's MOE announced the *Action Plans 21 for the Rejuvenation of Education*, as a blueprint for educational reform and development. The plan outlines the objectives of educational development in China from 2000 to 2010. Higher education in the China's western regions was identified as a new priority by the State in 2001. The State also developed flexible policies to attract students studying overseas to return and work in the country (*Action Plans 21 for the Rejuvenation of Education*).

#### **Tuition Policy (1998) - No More Free Higher Education**

China's higher education used to be free for students and the State subsidized all expenses. A tuition fee system was tested since 1994 and fully implemented in most of the institutions in 1997.

Until 1994, when China started preliminary experimentation with tuition fees in some universities, university admission was tightly controlled by the State. Students paid no fees and were assigned jobs upon graduation. This system did not only limit students' choice after graduation but also prevented industries from selecting the human resources. The compensation for going abroad was also a very large amount for students when their

income was still considerably low (World Bank, 1997, p.12). Higher education tuition reform was brought into consideration in 1989. The experimental implementation expanded to 37 institutions in 1994 and to about 500 in 1996. The distinction in fee levels between students financed by the State, enterprises, and themselves was also eliminated in 1994. Finally, the tuition policy and standard was further adjusted for national implementation in the year 1997. From 2000 to 2003 students' tuition covered 25% of their total educational cost. In some universities tuition was estimated to be as high as 50% of a student's direct education expenditure. Fees have been rising: in some cases from 10% to 15% of total annual revenues of university. Institutions are responsible for collecting and allocating students' tuition fees. The latter are spent mainly on faculty salary, teaching and learning facilities, student residences, and educational materials (PRC MOE, 1995-2004).

Under the new reform, although the State does not guarantee employment for graduates any more, this new mechanism gives graduates and employers the freedom to choose and the opportunity to compete (Zhang, He & Qiu, 2003; Li, 2001). There are, however, several controversial consequences associated with these policies. First, institutions have incentives to increase their revenue by expanding enrolment, regardless of their capacity to deliver and of the quality of teaching. Secondly, charging tuition fees can have a negative impact on equity if qualified students who cannot pay are forced to give up their places. Thirdly, the State accredits universities and colleges, particularly newly formed

private institutions. The latter are obliged to publish institutional performance indicators to enable students to make informed decisions about which institution to attend. The former merit based scholarships and grants system introduced in 1983 was changed into a new system of merit based on scholarships, grants and loans for needy students in 1987. The coverage varies by institution (Zhang, 2002; Du, 2000; Cai, 1997; Bie & Zhu, 2003). Income distribution is very uneven among different social groups in China. Along with institutionalizing cost-recovery initiatives from beneficiaries and raising fees to an appropriate level, the government also set up large-scale student loan programs in response to the uneven income distribution, allocating a large amount of funds to subsidize interest payments for students from needy families (Min, 2001).

### **Project 211 (1995)-Building 100 Top Universities for the 21<sup>st</sup> Century**

Project 211, which was launched in 1995, is the Chinese government's new initiative aimed at strengthening about 100 institutions of higher education and key disciplinary areas as a national priority for the 21st century. Primarily aimed at training high-level professionals to implement the national strategy for social and economic development, the project has great significance in the State's plan to improve higher education, accelerate the national economic progress, push forward the development of science, technology and culture, and enhance China's overall capacity and international competitiveness in order to lay the foundation for the training high-level human resources. During the Ninth Five-Year Plan period starting from 1996, the government

initiated actions to strengthen a number of institutions of higher learning and key disciplinary areas. The group of institutions in Project 211 set up national standards in overall quality, with some of the key universities and disciplinary areas approaching or reaching the advanced international standards. The majority of these institutions will have enhanced their physical conditions and staff competence, in addition to noticeable achievements in human resources training and scientific research. Adapting to regional and sectional development needs, these institutions are expected to play a key and exemplary role in leading research and teaching in their respective regions and fields.

According to CERNET (2001 Jan 01c), Project 211 targets three major components for development: the overall institutional capacity of higher education, the development of key disciplinary areas, and transforming the public service system of higher education. In the action plans and tasks of Project 211, priority would be accorded to the upgrading and improvement of the infrastructure for teaching and research in about 25 universities and in about 300 key disciplinary areas which have an important bearing on the social and economic development, scientific and technological advancement, and national defense. This clearly indicates that Project 211 is mainly oriented towards the economic development of China. According to the Chinese MOE (PRC MOE, 1996-04-10), the funding for Project 211 is generated through a co-financing mechanism involving central and local governments and HEIs. In line with the existing administrative system of higher education, funding would be mainly raised by the central ministries and local

governments that have the jurisdiction over the specific universities identified in the Project. Special funds allocated by the State serve to initiate, support, guide, and readjust the development of the Project. The special funds allocated by the central ministries and local governments would prioritize to meet the need of the State key disciplinary areas and the public service system of higher education, and then to upgrade the infrastructure development that is vital for. The special funds of the State will be used mainly to sponsor the development of the national key disciplinary areas and the public service system of higher education, and then on the infrastructure improvement in a small number of universities to increase the overall institutional quality.

As of January 2001, 101 institutions of higher education nationwide had gone through sector preliminary examination to become part of the Project 211. The State Planning Commission had so far approved the project feasibility study reports of 61 universities. As a result, these projects have been incorporated into the Ninth Five-Year National Plan. The examination and approval of the project feasibility study reports submitted by the other 40 universities were then in full progress (CERNET, 2001 Jan 01a).

Project 211 is a clear signal of the State that it aims to boost China's higher education in a short period of time by targeting a small number of institutions. Under this policy, a very large portion of central government funding has been allocated to these 101 institutions (CERNET, 2001 Jan 01a). Even if it appears that the total funding for all levels and types of HEIs have all increased for the past decade, there has been a clear



disparity among different levels and types of institutions. The rate of funding increase for the national regular institutions (all of which have been identified in Project 211) has been visibly faster than that of other institutions according to data in the next chapter. I think that this may even further imply that the development of the Project 211 institutions has come at the cost of other institutions.

### **Project 985-Creating World-Class Universities**

“It takes a long time to build a world leading university. It needs tremendous government support and funding but more importantly years of hard work of professors, students and staff members. At this point, China must concentrate the limited government funding, attract diverse resources, focus on key areas of study and several universities that are already equipped with the essential elements to become leading institutions. In the coming one to two decades, China will thrive to establish several world leading universities and disciplinary areas.”

*The Action Plans 21 for the Rejuvenation of Education*

Project 985 was announced by the Chinese MOE in May of 1998, three years following Project 211. This plan aims to develop the top 10 universities in the country. On May 4, while attending the 100th anniversary of Peking (Beijing) University, China's President Jiang Zemin delivered an important speech, iterating the necessity for China to address the importance of knowledge innovation as well as talent cultivation in economic development and social progress in an age of science and technology and of a knowledge-based economy. President Jiang (1998) stated “in order to realize modernization, China must have several universities that are leading research institutions in the world”. According to Hayhoe (2005), by late 1990s a few Chinese universities

reached or were close to world level in some research areas and the field of new technology. There were some leading researchers and high quality undergraduate programs in these universities, which made it possible for them to become world leading research institutions.

The first nine leading universities included in the 985 Project were three traditional comprehensive universities, Peking University, Fudan University and Nanjing University; as well as six technologically oriented universities, Tsinghua University, Shanghai Jiaotong University, Xi'an Jiaotong University, Zhejiang University, China University of Science and Technology in Hefei, Anhui Province, and Harbin University of Technology in Heilongjiang Province (Hayhoe & Pan, 2005).

Project 985 aims at pushing beyond the goals of Project 211. From the 100 institutions under Project 211, under this new project, 10 will be singled out in order to create elite universities that can play a leading role and have a cutting-edge advantage and compete internationally. The success of this initiative will benefit China's short-term goals, in terms of providing the country with a number of world leading universities within the near future. This said, in the long run, it is hard to say if this will benefit the development of China's higher education as a whole. Whether or not this is going to improve the teaching, learning and research of the higher education system is yet to be determined. It is evident that institutions shaped by the priority given to science and technology under Soviet influence in the 1950s seem to be better positioned to take the lead in this new

initiative. Interestingly, six of the top nine institutions in the 985 Project are in this category, while only three are traditional comprehensive universities (Hayhoe & Pan, 2005). Many questions and concerns over Project 985 persist, given that this project centralizes funding for an even smaller number of universities than Project 211.

***The Action Plans 21 for the Rejuvenation of Education (1999) - Blueprint for Cross-Century Educational Reform and Development in China***

The launching of *Action Plans 21 for the Rejuvenation of Education* in February 1999 marked another milestone in China's higher education development. In that same year, China began to explore *Minban* (private) higher education and reconsider the new national entrance examination system. The aim was to attract scholars from overseas to lead key research projects and to implement the student loan scheme. *Action Plans 21 for the Rejuvenation of Education* is a blueprint for cross-century educational reform and development in China. The *Plans* articulated the objectives of educational development in China from 2000 to 2010 including in the fields of quality education and teacher training, further accelerating Project 211. The *Plans* also emphasized the transformation of new technologies into production and encouraged schools and institutions run by other stakeholders than the State. According to Li (2001-12-25), a series of human resources development projects under the *Plans* was well implemented.

As part of the *Plans*, to realize the Creative Human Resource Project and recruit leading

researchers in the world, the State would provide targeted support for leading research projects and establish scholarships aimed at young professors, Ph.D. students, sending visiting scholars overseas, and inviting top professors to Chinese universities. HEIs are expected to combine government funding and self-raised funding to increase research resources and improve research facilities. The State would establish designated funds for indirect cost involved in laboratory-based research (*Action Plans 21 for Rejuvenation of Education*, 1998)

The *Action Plans* also identified mobilizing new technologies into production as a major project to develop China's new economy. In order to achieve this goal, the State would encourage institutions to establish their own enterprises using their research expertise. The *Action Plans 21* document states that these "enterprises should then, following modern management system, expand into high technology industrial corporations relying on these higher education institutions" (*Action Plans 21 for Rejuvenation of Education*, 1998)

To enhance the efficiency of education input was recognized as one of the top principles in the *Action Plans*. The document further states: "The old idea of looking at educational investments as consumer investment must be changed. Education should be viewed as a fundamental development and educational expenditure and should be a primary investment, which needs to be increased through every possible venue" (*Action Plans 21 for Rejuvenation of Education*, 1998). Both central and local governments need to insure

the “Three Increases” as part of implementing the *Plans*: the increase in government budgetary expenditure on education should be faster than the increase in government revenue; funding per student should increase steadily; faculty salaries and operating funds per student should increase steadily. Generally, the *Plans* requires the State to raise its budgetary expenditure on education to reach 4% of the GDP gradually. Investment in education by central and provincial governments is expected to represent the largest part of their total budgets. From 1998 onward, the central government is expected to increase its investment by an annual rate of 1% and from 2000, this percentage should be raised to 3%. All increases should be allocated towards the centrally supported projects in the *Action Plans*. At the same time, provincial governments’ investments on education are expected to be raised by 1% to 2% annually (*Action Plans 21 for Rejuvenation of Education*, 1998). Also, from 1998 onward, the excess revenue and non-budgetary revenue of all governments should be used on education at a rate that is not lower than the ratio of educational expenditure to total government expenditure in the beginning of the year (*Action Plans 21 for Rejuvenation of Education*, 1998).

In short, the *Action Plans* is a comprehensive policy document summarizing the major of initiatives and experiences China has implemented and gained in the past decade of educational reform. After analyzing the international environment, the government has generated a series of strategic plans steering the development of education in the beginning of the 21<sup>st</sup> century. Based on these plans, high quality human resources and

new technology are expected to represent the main focus of the State's support. The funding for higher education from government and non-government expenditures is expected to increase through both public and private venues.

### **Summary**

This chapter reviewed several major policies affecting the funding of China's higher education funding. These policy initiatives represent a comprehensive strategic plan for long-term development of China's education system as a whole.

Under current policy initiatives, the old revenue mechanism in which higher education depended solely on government expenditures has been fundamentally reformed into a new system. The latter mobilizes resources from diverse channels. Besides the annual increase of public expenditures, universities are also getting financial allocations from various non-governmental sources. All State policies have been relatively consistent in the same direction.

Nonetheless most major policies clearly favours a certain group of HEIs-the NRUCs. According to Project 211 and Project 985, some institutions, which are mostly national regular HEIs, enjoy much more favourable treatment from the central government. Some key disciplinary areas are given special funding support from public expenditures. Will the formation of a small number of supreme institutions disseminate fundamental changes across the whole system? Or will it lead to unfair competition and inequity in

terms of the distributions of higher education opportunities? Those who receive favourable treatment from the State not only need to worry less about their development but also attracting non-public investments. Their prestigious status given by the State and research advantage enable them to generate more non-public revenues over the other institutions. On the other hand, HEIs that are not part of the Project 211 institutions will have to struggle harder to survive and draw more funding from non-public sources. Thus these differential policies tend to create stratification amongst different levels of institutions.

## **CHAPTER 6:**

### **FUNDING CHINA'S HIGHER EDUCATION INSTITUTIONS, 1996-2003**

#### **Introduction**

The present chapter presents two series of data that identify the major trends in the funding of China's HEIs during the period 1996-2003. First, a series of data is presented in order to show the main sources of funding for each particular group of HEIs. This first part also assesses the relative weight of different sources of funding by institutional type. Secondly, a series of data are presented in view of showing how funding from one particular source is distributed across different categories of HEIs. This will help understand the destination of each particular financial resource and whether there is a correspondence between a specific type of funding and the category to which a HEI is affiliated.

Three funding resources and four categories of HEIs have been identified and described in Chapter 4. Here is a brief recapitulation. China's Central Bureau of Statistics identifies three major types of funding resources: Government (Central and Local) Budgetary Expenditure, Local Government Additional Expenditure, and Non-government Expenditure. China's Central Bureau of Statistics also identifies four groups of HEIs by level of administration and type of students enrolled: National Regular HEIs, Local Regular HEIs, National Adult HEIs and Local Adult HEIs.



### **Expenditure on Each Type of Institution by Sources of Funding**

Table 6.1 shows that the total expenditure on all HEIs grew by 5 times during the period 1996-2003. Funding from governmental budgetary expenditures more than tripled over the same period. The local government additional expenditure, although being quite insignificant compared with funding from other sources, increased by almost 5 times. Most interestingly, the funding from non-governmental sources, grew by nearly ten times, from 9 billion RMB in 1996 to 84 billion RMB in 2003. Despite the rapid growth of total expenditure, funding per student did not rise at that same speed. Funding remained unchanged over the period from government budgetary and additional expenditures, but it tripled from non-government sources. The total funding from all sources less than doubled as shown in Table 6.2.

Table 6.3 shows that the composition of funding from different sources changed between 1996-2003. While the weight of local government additional expenditure remains the same at 1%, government budgetary investments decreased from 67.8% in 1996 to 44.2% in 2003. During the same period, non-government expenses grew from 31.5% to 55.2% of the total.

Although both governmental budgetary expenditure and non-government expenditures increased over the period from 1996 to 2003, non-government expenses grew at a much faster speed than government expenses and eventually exceeded the latter in 1999 and

became the largest funding source for higher education as a whole. As shown in all three tables, there was a dramatic increase in the year 1999 for funding from all three sources, which coincides with the implementation of *the Action Plans 21 for Rejuvenation of Education*. It undoubtedly shows the importance and impact *the Action Plans* had on China's higher education.

Table 6.4 to 6.6 present data regarding the funding of national regular HEIs by sources. As the tables show, the local government additional expenditure for national regular HEIs is still very insignificant and did not exist until 1999. While the total income for these institutions increased by about 5 times, income from non-government sources grew by more than 6 times and that from the government budget tripled. Funding per student reached 20,000 RMB in 2003 from both government budgetary expenses and non-government investments. In 1996, there were only 9,000 RMB from the government budget and 4,000 RMB from non-government sources for national regular HEIs. The former only doubled and the latter increased by more than 5 times. The growing speed of total funding and funding per student was almost the same with the latter just a bit behind. The composition of funding from various sources also changed. Governmental funding decreased from over 60% to less than half in and non-governmental funding increased from 30% to over 50%.

Similarly, non-government expenditures became the major source for national regular institutions finance in 1999 replacing government expenditures.

For these national regular institutions, funding grew almost at the same rate with enrolment. The funding for these institutions is distributed almost equally between government and non-government sources after 1999. This shows that these institutions have been well supported over the years from both resources. All of these institutions are within the Project 211 and they enjoy the obvious priorities enumerated in the State's *Action Plans*.

Funding for local regular HEIs from all sources increased from 12 billion RMB to 83 billion during the period, that is, by nearly 7 times. Yet, when divided by the number of students this increase less than doubled. The total government budgetary expenditure on these institutions increased by 4 times while only remaining at the same average level per student. The local governmental additional expenses grew almost by 9 times in total but only doubled per student. Similarly funding from non-public revenues increased by well over 10 times in 2003 compared to 1996 and tripled per student over the same period of time. The relative weight of governmental expenditure decreased from 70% to 40% while that of non-government investments rose from 28% to 56%. Clearly, institutions and students at the local level did not receive the same level of support or treatment their national counterparts did. The increase in funding lacked far behind the increase in the number of institutions and expansion of enrollment at the local level. Local regular institutions did not appear to represent a priority in the government's funding policy. Students in these institutions may actually have suffered from insufficient resources

given to them the reform and expansion.

Despite similar trends of government and non-government funding to all HEIs and national regular institutions, funding for local regular institutions increased much less compared with their expansion. The resources available per student decreased to below the 1996 level by the middle of the period and, in 2003, ended up at the same level as in 1996. It is evident that the apparent increase in overall funding for these institutions doesn't bring any actual increase in funding for each student. Also proportionally speaking, more funding went into the national regular institutions, which were granted priority in various government policies. The local regular institutions, where most of the increase in the number of students took place, suffered insufficient funding.

In contradistinction, government budget funding for the national adult HEIs decreased almost by half. There were no local government additional expenses on adult HEIs during that same period. The revenue from non-public resources remained largely the same all along the period. Although the total expenditure on national adult HEIs also experienced fluctuations over the years, in 2003 it decreased below the 1996 budget. The relative weight of government funding vs. non-government funding changed from about half-half to 30% vs. 70%, respectively.

Non-government funding for national adult institutions remained very unstable all along the period. The same applies to the total expenditures for these institutions. However,

over the same period of time (1996-2003), the number of national adult institutions decreased dramatically too. This could explain the decrease in funding available for these institutions. Data shows that Adult HEI have become mainly a local level responsibility.

With regard to local adult HEIs, their total expenditure, from all sources, tripled between 1996 and 2003. Funding from the government budget doubled and that from non-government sources quadrupled. The local government additional expenses decreased by almost half. Government budget and additional expenditures together used to occupy over 55% of the total funding in 1996. It decreased to less than 40% in 2003. At the same time, funding from non-government sources, increased from 43% to 62%. Non-public funding became the major source of finance for local adult higher education too.

Funding from all sources increased significantly for local adult institutions except from local government additional expenditures. Non-government expenditure became the major funding source in 1999 replacing the government budgetary expenditure

This data series indicate that non-governmental finance had become the most important source of funding for different types institutions at different levels. The government budget lost its dominant position. Most dramatic changes happened in 1999 when *the Action Plan 21* was implemented. It also shows that the national regular institutions were the ones that benefited the most from the funding reform and have become the priority of

the government's new funding policy. While local level regular institutions had huge increases in their enrollment, the funding available to them did not catch up with expansion. Funding per student for local regular institutions was marginal. Adult higher education was gradually transferred to the local level institutions, suggesting a disengagement of the State.

#### **Expenditure from Each Funding Source for Higher Education by Type of Institution**

Table 6.14 indicates that the total expenditure from all sources on all HEIs increased by 5 times between 1996 and 2003. Over the same period, total funding for national regular HEIs also increased by 5 times. The largest increase occurred for the local regular HEIs, which was 7 times that of 1996. In contrast, the total expenditure on national adult HEIs decreased slightly while those on local adult HEIs tripled between 1996 and 2003.

Table 6.15 shows that the total higher education expenditure of national and local adult HEIs decreased significantly between 1996 and 2003. The position of national and local regular HEIs was reversed, with the latter becoming the major destination of funding. This resulted from the decrease in the number of national regular institutions and increase in local regular institutions. The number of national regular institutions dramatically decreased during the period 1996-2003 while the number of local regular HEIs expanded over the same period. Given government policies reviewed in Chapter 5, it may be that

many national institutions were merged to form larger and more competitive institutions. In the process, the funding of those institutions, not recognized as priorities, was shifted to local government administration.

The proportion of funding allocated to both national and local adult institutions decreased, indicating that adult higher education is not as important as regular higher education on the government's agenda. The actual funding amount increased significantly for all types of institutions except for the national adult HEIs, which were also reduced in number.

Table 6.16 and 6.17 indicate that the government budget expenses for all HEIs more than tripled. Government budget expenses for national regular HEIs, local regular HEIs and local adult HEIs also increased. Funding for national HEIs tripled and funding for local regular HEIs increased by over 4 times. Funding for local adult HEIs doubled. The only exception was in the funding for the national adult HEIs, which decreased by about half.

In 1996, over 47% of the government budgetary expenditure was allocated to national regular HEIs and over 44% to local regular HEIs. In 2003, over 52% of the government budgetary expenditure went to local regular HEIs, which became the major destination of government budget. The national regular HEIs received over 43% of the government budgets. Proportional to the total funding available for all institutions, there was an increase in the funding allocated towards national regular HEIs in 1999 and a decrease towards local regular HEIs in the same year. Despite the fact that only a small portion of

government budgetary expenses went to national and local adult HEIs, they both decreased over the years. All trends are very similar in government budgetary funding and in total funding.

As shown in Table 6.18 and 6.19, local government additional expenditure was mainly allocated to local regular and adult HEIs. It increased by almost 9 times from 1996 to 2003 for local regular HEIs but decreased by 40% for local adult HEIs. There was no expenditure for national regular HEIs until 1999 and there had been no allocation to national adult HEIs by 2003. The local additional expenditure was shared almost equally between the local regular HEIs and local adult HEIs in 1996. By 2003, local regular HEIs absorbed over 92% of the funding and became the single largest destination of local additional funding.

Funding from non-government sources grew by about 8 times for national regular HEIs, over 10 times for local regular HEIs, and over 4 times for local adult HEIs. For national HEIs, however, it remained more or less the same. National regular HEIs used to occupy close to 50% of the non-government funding in 1996 but their share decreased to 39% in 2003. The allocation to local regular HEIs increased from 38% in 1996 to 54% in 2003. The share for national and local adult HEIs decreased from 1.4% to 0.3% and from 13% to 6% respectively. In 1996, national regular HEIs were allocated the largest share of the non-government expenditures. The largest share then went to local regular HEIs in 2003.



Non-government funding grew dramatically for both national and local regular HEIs. It only slightly increased for local adult and decreased for national adult HEIs due to the decrease in the number of these institutions. The largest allocation of non-government expenditure was shifted to local regular HEIs from national regular HEIs, which coincides with the increase in the number of local regular institutions and decrease in national regular institutions.

### **Summary**

The total higher education expenditure from various sources, all increased dramatically for China's HEIs. When the sources of funding were more closely examined, the share of government budgetary expenditures and non-government expenditures switched between 1996 and 2003, with 1999 representing a turning point. Funding from non-government sources became the major income for HEIs. Government budget decreased. Local government additional expenditures remained as a small supplement all through the period.

Funding appears to lag behind the expansion of the higher education enrolments. When each particular funding source was examined by institutional type, the share of funding allocations to national regular HEIs and local regular HEIs switched from 1996 to 2003. National regular HEIs no longer absorbed the largest share of funding from various sources in 2003. The actual money figure of funding from different sources decreased for

national adult HEIs. The proportion of funding from each source towards both national and local adult HEIs all decreased too.

The shifts in funding reflect the government policy in reforming the higher education. Funding resources became diversified and non-government funding became the major source for higher education income within less than 3 years' time. Most of the changes occurred in 1999 and 2000, when the *Action Plans 21 for the Rejuvenation of Education* was being implemented.

Regular HEIs, especially the national ones, have received most attention from the State and the largest allocations of funding per institution. This echoes the essence of Project 211 and Project 985 to create a small number of elite institutions. Therefore the statistics confirm that the State's retreat from financing public higher education was not equal to all HEIs. Public funding from central government retrenched more significantly for adult HEIs because the State is gradually shifting the responsibility of adult higher education to the local government. The national adult HEIs are diminishing and will likely disappear eventually. In order to realize the goal of Project 211 and Project 985, the State must continue to heavily support the few national institutions. Local regular HEIs are the major bearers of the important mission to provide mass higher education, thus State's funding is still necessary to serve large number of students studying in local institutions.

During the period under study, local regular HEIs received less funding, lagging behind

the expansion of student population. Although these institutions represent the major recipient of funding from different resources, it is because the local regular institutions also have the most number of institutions and most number of students enrolled. The funding allocated to each local institution and per student is lacking far behind of their national counter parts.

Funding per student for NRUCs, more than tripled in total, more than doubled from government expenditures, and increased by more than five-times for non-government sources. In other words, government and non-government sources are contributing almost equally to students enrolled in these national institutions. On the other hand, funding per student for local regular universities and colleges, less than doubled in total and remained the same portion of government expenditure. Data shows that national regular institutions are much better off than local level institutions. Their funding per student was almost 4 times of what's allocated to each student in local institutions.

**Table 6.1: Total Expenditure on All HEIs by Source of Funding (RMB\*1,000)**

<b>Year</b>	<b>Central &amp; Local Government Budgets</b>	<b>Local Government Additional Expenditure</b>	<b>Non-Government</b>	<b>Total</b>
<b>1996</b>	19,815,318	191,930	9,212,544	29,219,792
<b>1997</b>	22,798,377	360,145	11,396,733	34,555,255
<b>1998</b>	26,346,683	451,657	14,711,470	41,509,810
<b>1999</b>	28,851,482	811,300	29,041,060	58,703,842
<b>2000</b>	36,865,411	773,231	37,691,958	75,330,600
<b>2001</b>	45,706,690	917,160	50,038,362	96,662,212
<b>2002</b>	56,052,130	780,341	64,515,023	121,347,494
<b>2003</b>	67,557,707	924,826	84,267,425	152,749,958
<b>Difference (Between 1996-2003)</b>	<b>47,742,389</b>	<b>732,896</b>	<b>75,054,881</b>	<b>123,530,166</b>

**Table 6.2: Total Expenditure per Student for all HEIs by Source of Funding (RMB)**

<b>Year</b>	<b>Central &amp; Local Government Budget</b>	<b>Local Government Additional Expenditure</b>	<b>Non-Government</b>	<b>Total</b>
<b>1996</b>	3,393.38	32.87	1,577.65	5,003.90
<b>1997</b>	3,760.81	59.41	1,880.00	5,700.21
<b>1998</b>	4,106.34	70.39	2,292.90	6,469.63
<b>1999</b>	3,894.69	109.52	3,920.28	7,924.49
<b>2000</b>	3,929.71	82.42	4,017.82	8,029.95
<b>2001</b>	3,651.98	73.28	3,998.08	7,723.34
<b>2002</b>	3,832.57	53.36	4,411.22	8,297.15
<b>2003</b>	3,906.27	53.47	4,872.44	8,832.18
<b>Difference (Between 1996-2003)</b>	<b>513</b>	<b>21</b>	<b>3,295</b>	<b>3,828</b>

**Table 6.3: Expenditure on All HEIs by Source of Funding as Percentage of Total Expenditure on All HEIs and Year to year % Change**

<b>Year</b>		<b>Central &amp; Local Government Budget</b>	<b>Local Government Additional Expenditure</b>	<b>Non-Government</b>	<b>Total Expenditure on All HEIs</b>
<b>1996</b>	as % of total	67.8%	0.7%	31.5%	100%
<b>1997</b>	as % of total	66.0%	1.0%	33.0%	100%
	% change	-2.7%	58.7%	4.6%	14%
<b>1998</b>	as % of total	63.5%	1.1%	35.4%	100%
	% change	-3.8%	4.4%	7.5%	13%
<b>1999</b>	as % of total	49.1%	1.4%	49.5%	100%
	% change	-22.6%	27.0%	39.6%	22%
<b>2000</b>	as % of total	48.9%	1.0%	50.0%	100%
	% change	-0.4%	-25.7%	1.1%	1%
<b>2001</b>	as % of total	47.3%	0.9%	51.8%	100%
	% change	-3.4%	-7.6%	3.5%	-3.8%
<b>2002</b>	as % of total	46.2%	0.6%	53.2%	100%
	% change	-2.3%	-32.2%	2.7%	7%
<b>2003</b>	as % of total	44.2%	0.6%	55.2%	100%
	% change	-4.3%	-5.8%	3.8%	6%
	% Difference (Between 1996-2003)	<b>-23.6%</b>	<b>-0.1%</b>	<b>23.7%</b>	<b>77%</b>

**Table 6.4: Expenditure on National Regular HEIs by Source of Funding**  
**(RMB\*1,000)**

<b>Year</b>	<b>Central &amp; Local Government Budget</b>	<b>Local Government Additional Expenditure</b>	<b>Non-Government</b>	<b>Total</b>
<b>1996</b>	9,431,131	-	4,399,777	13,830,908
<b>1997</b>	10,933,873	-	5,289,630	16,223,503
<b>1998</b>	12,599,772	-	7,359,447	19,959,219
<b>1999</b>	15,038,112	11210	17,527,284	32,576,606
<b>2000</b>	16,976,728	91260	19,085,842	36,153,830
<b>2001</b>	20,197,649	105,704	21,475,385	41,778,738
<b>2002</b>	24,239,416	1,346	25,221,380	49,462,142
<b>2003</b>	29,106,709	72,987	31,784,164	60,963,860
<b>Difference (Between 1996-2003)</b>	<b>19,675,578</b>	<b>72,987</b>	<b>27,384,387</b>	<b>47,132,952</b>

**Table 6.5: Expenditure per Student on National Regular HEIs by Source of Funding  
(RMB)**

Year	Central & Local Government Budget	Local Government Additional Expenditure	Non-Government	Total
1996	8,820.72	-	4,115.01	12,935.73
1997	8,019.86	-	3,879.88	11,899.74
1998	8,175.40	-	4,775.20	12,950.60
1999	18,838.28	14.04	21,956.48	40,808.80
2000	15,352.93	82.53	17,260.31	32,695.76
2001	15,778.91	82.58	16,777.11	32,638.59
2002	17,242.51	0.96	17,941.02	35,184.49
2003	20,704.82	51.92	22,609.40	43,366.14
<b>Difference (Between 1996-2003)</b>	<b>11,884</b>	<b>51.92</b>	<b>18,494</b>	<b>30,430</b>

Note: the number of students in 2003 is the same as for 2002.



**Table 6.6: Expenditure on National Regular HEIs by Sources of Funding as % of Total Expenditure on National Regular HEIs and Year to year % Change**

Year		Central & Local Government Budget	Local Government Additional Expenditure	Non-Government	Total Expenditure on National Regular HEIs
1996	as % of total	68.2%	-	31.8%	100%
1997	as % of total	67.4%	-	32.6%	100%
	% change	-1.2%	-	2.5%	-8%
1998	as % of total	63.1%	-	36.9%	100%
	% change	-6.3%	-	13.1%	9%
1999	as % of total	46.2%	0.0%	53.8%	100%
	% change	-26.9%	-	45.9%	215%
2000	as % of total	47.0%	0.3%	52.8%	100%
	% change	1.7%	633.5%	-1.9%	-20%
2001	as % of total	48.3%	0.3%	51.4%	100%
	% change	3.0%	0.2%	-2.6%	-0.2%
2002	as % of total	49.0%	0.0%	51.0%	100%
	% change	1.4%	-98.9%	-0.8%	8%
2003	as % of total	47.7%	0.1%	52.1%	100%
	% change	-2.6%	4299.5%	2.2%	23%
	% Difference (Between 1996-2003)	-21%	0.10%	20%	235%

Note: Number of student in 2003 is the same as for 2002.

**Table 6.7: Expenditure on Local Regular HEIs by Source of Funding (RMB\*1,000)**

<b>Year</b>	<b>Central &amp; Local Government Budget</b>	<b>Local Government Additional Expenditure</b>	<b>Non-Government</b>	<b>Total</b>
<b>1996</b>	8,811,707	91,024	3,495,226	12,397,957
<b>1997</b>	10,137,292	291,158	4,421,299	14,849,749
<b>1998</b>	11,805,891	378,319	5,415,329	17,599,539
<b>1999</b>	11,972,087	734,926	9,196,309	21,903,322
<b>2000</b>	17,809,979	599,709	15,859,782	34,269,470
<b>2001</b>	23,103,125	723,514	24,837,338	48,663,977
<b>2002</b>	29,280,595	720,370	35,053,791	65,054,756
<b>2003</b>	35,531,479	783,239	47,393,713	83,708,431
<b>Difference (Between 1996-2003)</b>	<b>26,719,772</b>	<b>692,215</b>	<b>43,898,487</b>	<b>71,310,474</b>

**Table 6.8: Expenditure per Student in Local Regular HEIs by Source of Funding  
(RMB)**

<b>Year</b>	<b>Central &amp; Local Government Budgetary</b>	<b>Local Government Additional Expenditure</b>	<b>Non-Government</b>	<b>Total</b>
<b>1996</b>	5,183.73	53.55	2,056.16	7,293.44
<b>1997</b>	5,597.58	160.77	2,441.34	8,199.69
<b>1998</b>	5,228.73	167.55	2,398.40	7,794.69
<b>1999</b>	4,211.18	258.51	3,234.80	7,704.49
<b>2000</b>	3,997.63	134.61	3,559.89	7,692.13
<b>2001</b>	3,908.75	122.41	4,202.16	8,233.32
<b>2002</b>	4,244.30	104.42	5,081.14	9,429.86
<b>2003</b>	5,150.38	113.53	6,869.85	12,133.76
<b>Difference (Between 1996-2003)</b>	<b>-33</b>	<b>60</b>	<b>4,814</b>	<b>4,840</b>

Note: the number of students in 2003 is the same as for 2002.

**Table 6.9: Expenditure on Local Regular HEIs by Source of Funding as % of Total  
Expenditure on National Regular HEIs and Year to year % Change**

<b>Year</b>		<b>Central &amp; Local Government Budget</b>	<b>Local Government Additional Expenditure</b>	<b>Non-Government</b>	<b>Total Expenditure on National Regular HEIs</b>
<b>1996</b>	as % of total	71.1%	-	28.2%	100%
<b>1997</b>	as % of total	68.3%	-	29.8%	100%
	% change	-4.0%	-	5.6%	12%
<b>1998</b>	as % of total	67.1%	-	30.8%	100%
	% change	-1.7%	-	3.3%	-5%
<b>1999</b>	as % of total	54.7%	3.4%	42.0%	100%
	% change	-18.5%	-	36.5%	-1%
<b>2000</b>	as % of total	52.0%	1.7%	46.3%	100%
	% change	-4.9%	-47.8%	10.2%	-0.2%
<b>2001</b>	as % of total	47.5%	1.5%	51.0%	100%
	% change	-8.7%	-15.0%	10.3%	7%
<b>2002</b>	as % of total	45.0%	1.1%	53.9%	100%
	% change	-5.2%	-25.5%	5.6%	15%
<b>2003</b>	as % of total	42.4%	0.9%	56.6%	100%
	% change	-5.7%	-15.5%	5.1%	29%
	<b>Difference (Between 1996-2003)</b>	<b>0.9%</b>	<b>28.4%</b>	<b>-28.7%</b>	<b>66%</b>

Note: the number of students in the same as for 2002

**Table 6.10: Expenditure on National Adult HEIs by Source of Funding  
(RMB\*1,000)**

	<b>Central &amp; Local Government Budget</b>	<b>Local Government Additional Expenditure</b>	<b>Non-Government</b>	<b>Total</b>
<b>1996</b>	131,736	-	129,405	261,141
<b>1997</b>	58,121	-	156,924	215,045
<b>1998</b>	52,898	-	114,652	167,550
<b>1999</b>	79,904	-	64,974	144,878
<b>2000</b>	89,712	-	129,104	218,816
<b>2001</b>	126,317	-	190,631	316,948
<b>2002</b>	81,763	-	188,056	269,819
<b>2003</b>	73,548	-	163,214	236,762
<b>Difference (Between 1996-2003)</b>	<b>-58,188</b>	<b>-</b>	<b>33,809</b>	<b>-24,379</b>

**Table 6.11: Expenditure on National Adult HEIs by Source of Funding as % of Total Expenditure on National Adult HEIs and Year to year % Change**

Year		Central & Local Government Budget	Local Government Additional Expenditure	Non-Government	Total Expenditure on National Adult HEIs
1996	as % of total	50.4%	-	49.6%	100%
1997	as % of total	27.0%	-	73.0%	100%
	% change	-46.4%	-	47.3%	-18%
1998	as % of total	31.6%	-	68.4%	100%
	% change	16.8%	-	-6.2%	-22%
1999	as % of total	55.2%	-	44.8%	100%
	% change	74.7%	-	-34.5%	-14%
2000	as % of total	41.0%	-	59.0%	100%
	% change	-25.7%	-	31.6%	51%
2001	as % of total	39.9%	-	60.1%	100%
	% change	-2.8%	-	1.9%	45%
2002	as % of total	30.3%	-	69.7%	100%
	% change	-24.0%	-	15.9%	-15%
2003	as % of total	31.1%	-	68.9%	100%
	% change	2.5%	-	-1.1%	-12%
	% Difference (Between 1996-2003)	-47.9%	-	-50.7%	-9%

**Table 6.12: Expenditure on Local Adult HEIs by Source of Funding (RMB\*1,000)**

<b>Year</b>	<b>Central &amp; Local Government Budget</b>	<b>Local Government Additional Expenditure</b>	<b>Non-Government</b>	<b>Total</b>
<b>1996</b>	1,440,744	100,906	1,188,136	2,729,786
<b>1997</b>	1,669,091	68,987	1,528,880	3,266,958
<b>1998</b>	1,888,122	73,338	1,822,042	3,783,502
<b>1999</b>	1,761,379	65,164	2,252,493	4,079,036
<b>2000</b>	1,988,992	82,262	2,617,230	4,688,484
<b>2001</b>	2,279,599	87,942	3,535,008	5,902,549
<b>2002</b>	2,450,356	58,625	4,051,796	6,560,777
<b>2003</b>	2,845,971	68,600	4,926,334	7,840,905
<b>Difference (Between 1996-2003)</b>	1,405,227	-32,306	3,738,198	5,111,119

**Table 6.13: Expenditure on Local Adult HEIs by Source of Funding as % of Total Expenditure on National Adult HEIs and Year to year % Change**

Year		Central & Local Government Budget	Local Government Additional Expenditure.	Non-Government	Total Expenditure on National Adult HEIs
1996	as % of total	52.8%	3.7%	43.5%	100%
1997	as % of total	51.1%	2.1%	46.8%	100%
	% change	-3.2%	-42.9%	7.5%	20%
1998	as % of total	49.9%	1.9%	48.2%	100%
	% change	-2.3%	-8.2%	2.9%	16%
1999	as % of total	43.2%	1.6%	55.2%	100%
	% change	-13.5%	-17.6%	14.7%	8%
2000	as % of total	42.4%	1.8%	55.8%	100%
	% change	-1.8%	9.8%	1.1%	15%
2001	as % of total	38.6%	1.5%	59.9%	100%
	% change	-9.0%	-15.1%	7.3%	26%
2002	as % of total	37.3%	0.9%	61.8%	100%
	% change	-3.3%	-40.0%	3.1%	11%
2003	as % of total	36.3%	0.9%	62.8%	100%
	% change	-2.8%	-2.1%	1.7%	20%
	% Difference (Between 1996-2003)	-55.6%	-5.8%	-41.8%	187%



**Table 6.14: Total Expenditure on HEIs by Type of Institution (RMB\*1,000)**

<b>Year</b>	<b>National Regular HEIs</b>	<b>Local Regular HEIs</b>	<b>National Adult HEIs</b>	<b>Local Adult HEIs</b>	<b>All HEIs</b>
<b>1996</b>	13,830,908	12,397,957	261,141	2,729,786	29,219,792
<b>1997</b>	16,223,503	14,849,749	215,045	3,266,958	34,555,255
<b>1998</b>	19,959,219	17,599,539	167,550	3,783,502	41,509,810
<b>1999</b>	32,576,606	21,903,322	144,878	4,079,036	58,703,842
<b>2000</b>	36,153,830	34,269,470	218,816	4,688,484	75,330,600
<b>2001</b>	41,778,738	48,663,977	316,948	5,902,549	96,662,212
<b>2002</b>	49,462,142	65,054,756	269,819	6,560,777	121,347,494
<b>2003</b>	60,963,860	83,708,431	236,762	7,840,905	152,749,958
<b>Change (1996-2003)</b>	<b>47,132,952</b>	<b>71,310,474</b>	<b>-24,379</b>	<b>5,111,119</b>	<b>123,530,166</b>

Note: figures before 1998 include funds for facility construction (教育基建费).

**Table 6.15: Total Expenditure on Different Types of Institutions as % of Total Expenditure on All HEIs and Year to year % Change**

<b>Year</b>		<b>National Regular HEIs</b>	<b>Local Regular HEIs</b>	<b>National Adult HEIs</b>	<b>Local Adult HEIs</b>	<b>Total Expenditure on All HEIs</b>
<b>1996</b>	<b>as % of total</b>	47.3%	42.4%	0.9%	9.3%	100%
<b>1997</b>	<b>as % of total</b>	46.9%	43.0%	0.6%	9.5%	100%
	<b>% change</b>	-0.8%	1.3%	-30.4%	1.2%	18%
<b>1998</b>	<b>as % of total</b>	48.1%	42.4%	0.4%	9.1%	100%
	<b>% change</b>	2.4%	-1.3%	-35.1%	-3.6%	20%
<b>1999</b>	<b>as % of total</b>	55.5%	37.3%	0.2%	6.9%	100%
	<b>% change</b>	15.4%	-12.0%	-38.9%	-23.8%	41%
<b>2000</b>	<b>as % of total</b>	48.0%	45.5%	0.3%	6.2%	100%
	<b>% change</b>	-13.5%	21.9%	17.7%	-10.4%	28%
<b>2001</b>	<b>as % of total</b>	43.2%	50.3%	0.3%	6.1%	100%
	<b>% change</b>	-9.9%	10.7%	12.9%	-1.9%	28%
<b>2002</b>	<b>as % of total</b>	40.8%	53.6%	0.2%	5.4%	100%
	<b>% change</b>	-5.7%	6.5%	-32.2%	-11.5%	26%
<b>2003</b>	<b>as % of total</b>	39.9%	54.8%	0.2%	5.1%	100%
	<b>% change</b>	-2.1%	2.2%	-30.3%	-5.1%	26%
	<b>% Difference (Between 1996-2003)</b>	<b>-7.4%</b>	<b>12.4%</b>	<b>-0.7%</b>	<b>-4.2%</b>	<b>423%</b>

**Table 6.16: Government Budget Expenditure on Higher Education by Type of Institutions (RMB\*1,000)**

<b>Year</b>	<b>National Regular HEIs</b>	<b>Local Regular HEIs</b>	<b>National Adult HEIs</b>	<b>Local Adult HEIs</b>	<b>All HEIs</b>
<b>1996</b>	9,431,131	8,811,707	131,736	1,440,744	19,815,318
<b>1997</b>	10,933,873	10,137,292	58,121	1,669,091	22,798,377
<b>1998</b>	12,599,772	11,805,891	52,898	1,888,122	26,346,683
<b>1999</b>	15,038,112	11,972,087	79,904	1,761,379	28,851,482
<b>2000</b>	16,976,728	17,809,979	89,712	1,988,992	36,865,411
<b>2001</b>	20,197,649	23,103,125	126,317	2,279,599	45,706,690
<b>2002</b>	24,239,416	29,280,595	81,763	2,450,356	56,052,130
<b>2003</b>	29,106,709	35,531,479	73,548	2,845,971	67,557,707
<b>Difference (Between 1996-2003)</b>	<b>19,675,578</b>	<b>26,719,772</b>	<b>-58,188</b>	<b>1,405,227</b>	<b>47,742,389</b>

**Table 6.17: Government Budget Expenditure on Different Type of Institutions as % of Total Government Budget Expenditure on All HEIs and Year to year % Change**

Year		National Regular HEIs	Local Regular HEIs	National Adult HEIs	Local Adult HEIs	Total Government Budget Expenditure on All HEIs
1996	as % of total	47.6%	44.5%	0.7%	7.3%	100%
1997	as % of total	47.6%	44.5%	0.7%	7.2%	100%
	% change	0.0%	0.0%	0.0%	-1.4%	15%
1998	as % of total	48.0%	44.5%	0.3%	5.4%	100%
	% change	0.8%	0.0%	-61.7%	-24.7%	16%
1999	as % of total	47.8%	44.8%	0.2%	7.2%	100%
	% change	-0.3%	0.8%	-21.2%	32.8%	10%
2000	as % of total	52.1%	41.5%	0.3%	6.1%	100%
	% change	9.0%	-7.4%	37.9%	-14.8%	28%
2001	as % of total	46.1%	48.3%	0.2%	5.4%	100%
	% change	-11.6%	16.4%	-12.1%	-11.6%	24%
2002	as % of total	44.2%	50.5%	0.3%	5.0%	100%
	% change	-4.0%	4.6%	13.6%	-7.6%	23%
2003	as % of total	43.2%	52.2%	0.1%	4.4%	100%
	% change	-2.1%	3.3%	-47.2%	-12.3%	21%
	% Difference (Between 1996-2003)	-49.7%	-41.2%	-47.9%	-19.6%	241%

**Table 6.18: Local Government Additional Expenditure on Higher Education by  
Type of Institutions (RMB\*1,000)**

<b>Year</b>	<b>National Regular HEIs</b>	<b>Local Regular HEIs</b>	<b>National Adult HEIs</b>	<b>Local Adult HEIs</b>	<b>All HEIs</b>
<b>1996</b>	-	91,024	-	100,906	191,930
<b>1997</b>	-	291,158	-	68,987	360,145
<b>1998</b>	-	378,319	-	73,338	451,657
<b>1999</b>	11,210	734,926	-	65,164	811,300
<b>2000</b>	91,260	599,709	-	82,262	773,231
<b>2001</b>	105,704	723,514	-	87,942	917,160
<b>2002</b>	1,346	720,370	-	58,625	780,341
<b>2003</b>	72,987	783,239	-	68,600	924,826
<b>Difference (Between 1996-2003)</b>	<b>61,777*</b>	<b>692,215</b>	<b>-</b>	<b>-32,306</b>	<b>732,896</b>

\* Difference between 1999 and 2003.

**Table 6.19: Local Government Additional Expenditure on Different Types of Institutions as % of Total Local Government Budget Expenditure on All HEIs and Year to year % Change**

<b>Year</b>		<b>National Regular HEIs</b>	<b>Local Regular HEIs</b>	<b>National Adult HEIs</b>	<b>Local Adult HEIs</b>	<b>Total Local Government Budget Expenditure on All HEIs</b>
<b>1996</b>	<b>as % of total</b>	-	47.4%	-	52.6%	100%
<b>1997</b>	<b>as % of total</b>	-	81%	-	19%	100%
	<b>% change</b>	-	70%	-	-64%	88%
<b>1998</b>	<b>as % of total</b>	-	84%	-	16%	100%
	<b>% change</b>	-	4%	-	-15%	25%
<b>1999</b>	<b>as % of total</b>	1%	91%	-	8%	100%
	<b>% change</b>	-	8%	-	-51%	80%
<b>2000</b>	<b>as % of total</b>	12%	78%	-	11%	100%
	<b>% change</b>	754%	-14%	-	32%	-5%
<b>2001</b>	<b>as % of total</b>	12%	79%	-	10%	100%
	<b>% change</b>	-2%	2%	-	-10%	19%
<b>2002</b>	<b>as % of total</b>	0.2%	92%	-	8%	100%
	<b>% change</b>	-99%	17%	-	-22%	-15%
<b>2003</b>	<b>as % of total</b>	8%	85%	-	7%	100%
	<b>% change</b>	4475%	-8%	-	-1%	19%
	<b>% Difference (Between 1996-2003)</b>	<b>10%</b>	<b>94%</b>	<b>-</b>	<b>-4%</b>	<b>382%</b>

**Table 6.20: Non-Government Expenditure on Higher Education by Type of Institutions (RMB\*1,000)**

<b>Year</b>	<b>National Regular HEIs</b>	<b>Local Regular HEIs</b>	<b>National Adult HEIs</b>	<b>Local Adult HEIs</b>	<b>All HEIs</b>
<b>1996</b>	4,399,777	3,495,226	129,405	1,188,136	9,212,544
<b>1997</b>	5,289,630	4,421,299	156,924	1,528,880	11,396,733
<b>1998</b>	7,359,447	5,415,329	114,652	1,822,042	14,711,470
<b>1999</b>	17527284	9,196,309	64,974	2,252,493	29,041,060
<b>2000</b>	19085842	15,859,782	129,104	2,617,230	37,691,958
<b>2001</b>	21,475,385	24,837,338	190,631	3,535,008	50,038,362
<b>2002</b>	25,221,380	35,053,791	188,056	4,051,796	64,515,023
<b>2003</b>	31,784,164	47,393,713	163,214	4,926,334	84,267,425
<b>Difference (Between 1996-2003)</b>	<b>27,384,387</b>	<b>43,898,487</b>	<b>33,809</b>	<b>3,738,198</b>	<b>75,054,881</b>

**Table 6.21: Non-Government Expenditure on Different Types of Institutions as % of  
Total Non-Government Budget Expenditure on All HEIs and Year to  
year % Change**

Year		National Regular HEIs	Local Regular HEIs	National Adult HEIs	Local Adult HEIs	Total Non-Government Expenditure on All HEIs
1996	as % of total	47.8%	37.9%	1.4%	12.9%	100%
1997	as % of total	47.8%	37.9%	1.4%	12.4%	100%
	% change	0.0%	0.0%	0.0%	-4.0%	24%
1998	as % of total	46.4%	38.8%	1.4%	6.9%	100%
	% change	-2.8%	2.3%	-2.0%	-43.9%	29%
1999	as % of total	50.0%	36.8%	0.8%	12.4%	100%
	% change	7.8%	-5.1%	-43.4%	78.4%	97%
2000	as % of total	60.4%	31.7%	0.2%	7.8%	100%
	% change	20.6%	-14.0%	-71.3%	-37.4%	30%
2001	as % of total	50.6%	42.1%	0.3%	6.9%	100%
	% change	-16.1%	32.9%	53.1%	-10.5%	33%
2002	as % of total	42.9%	49.6%	0.4%	7.1%	100%
	% change	-15.2%	18.0%	11.2%	1.7%	29%
2003	as % of total	39.1%	54.3%	0.3%	6.3%	100%
	% change	-8.9%	9.5%	-23.5%	-11.1%	31%
	% Difference (Between 1996-2003)	-56.7%	-28.4%	-24.9%	-24.0%	815%



## **CHAPTER 7:**

### **DISCUSSION AND CONCLUSIONS**

The point of departure of the present study was the observed mismatch between China's centralized and socialist state structure and the increasingly more diversified funding scheme of higher education since 1996. Several questions were raised in this regard: What has propelled China, a socialist State with a centralized political structure, to implement funding diversification for higher education and in such a rapid speed and on such a vast scale? What theories can account for the observed mismatch? What implications does the funding diversification process have for the Chinese society?

The present study examined the policies and funding practices, which accompanied the restructuring of China's higher education institution during the period 1996-2003. Four different hypothetical theoretical scenarios were constructed in an attempt to account for the discrepancy between China's centralized and socialist state system and its increasingly diversified funding scheme for higher education. These scenarios draw on Human Capital Theory, Resource Dependence Theory, Mass Higher Education Theory, and Social Constructivism.

In what follows, I discuss the possibilities and limits of these theoretical approaches based on the findings presented in Chapter 5 and Chapter 6. I also offer my own

reflections on the matter. In the subsequent paragraphs, I first summarize the major global trends of higher education finance discussed in the literature. Secondly, I recap the major process in China's higher education funding diversification as revealed by findings from Chapter 5 and Chapter 6. Each of the four theories explored in my study addresses China's diversified finance for higher education from a different perspective. The third part of the present chapter discusses and concludes the goodness of fit for each of the four theoretical hypotheses in analyzing diversification process of China's higher education finance.

According to Tilak (2006), many countries have inflicted significant budget cuts in some if not all of the following areas: total public expenditures on higher education, per student expenditures, public higher education expenditure share in relation to a particular country's national income or total government budget expenditure, and allocations in absolute and relative terms to important programs that include research and scholarships. The decline is not confined to developing countries. Altbach (1997) points out that, in the process, the decline in public expenditure is accompanied by the introduction and popularization of cost recovery practices in post-secondary education institutions. A public consensus is growing both from the media's viewpoint and government publications that higher education is a "private good" primarily benefiting the individual rather than a social investment necessary for a modern economy. This perspective implies that the major cost of study at the postsecondary level should be borne by the individual

rather than by society. Countries where higher education used to be provided free of charge are now charging tuition fees and others where fees already existed increased fee rates. University tuition fees have become a contentious issue in recent years in countries as diverse as the United Kingdom, Russia, India, Hungary, South Africa, Vietnam and many more. So far, the overall contribution of cost recovery is relatively small in many countries, but as demand for higher education increases, the pressure to share financial burdens on government, by introducing or increasing tuition fees, is likely to grow (Woodhall, 2001). Besides the tuition fees, many university services are no longer free or subsidized: housing and food service, medical services, transportations, and admission and application fees. Along with the tuition fee, student fees seem to account for an ever so significant part of the universities' income. What used to be paid by the government is now largely paid by private sectors and individuals. In many countries, the decrease in public funding also forced HEIs to look for financing outside their home countries (OECD 1997, p53).

Vidovich et al. (2007, p.90) argue that it "is increasingly difficult to understand education policies and practices without reference to globalisation process". Vidovich et al. (2007, p.90) also points out that globalization can have both practical and ideological dimensions. "Supranational organizations", such as the World Bank, International Monetary Fund (IMF) and OECD are powerful global regulators with increasing impact on higher education policies. HEIs are fast becoming entrepreneurial organizations both

domestically and internationally. Some universities excel more than others in globally linked academic activities. Among some of the indications are the number of foreign students and scholars who flow back and forth between university systems, the global character of the curriculum, and cross-national scholarly publishing in other languages. Funding diversification has become a global phenomenon despite different local cultures and politics in each country. However, the latest developments and findings in many comparative studies indicate that decentralization can be a mechanism for extending government control over more higher education resources (Yang, 2002).

The findings presented in this study show that the absolute RMB amount of total expenditure increased from all sources for China's HEIs, reflecting the growing support for China's higher education from all actors of society. Notwithstanding, during the period 1996-2003, non-government expenditures became the largest funding source for HEIs instead of the government budgetary. The major portion of funding during the period of 1996-2002 was allocated to the national level institutions. In 2003, however, local regular HEIs began to attract the major part of funding. Throughout the period under study, local government additional expenditure has played a marginal role in financing higher education. The funding towards both national and local adult HEIs from all sources as a percentage of total higher education funding decreased during the period 1996-2003, indicating regular HEIs were over emphasize than adult HEIs. The change in China's higher education funding scheme is the result of a combination of demographic

pressures, fiscal realities, and the rationale of the reduced role of the State in funding higher education.

The diversification of funding resources and non-government funding as the major source for higher education occurred within a process of less than 3 years' time. Most of the fundamental shifts happened in the year of 1999 and 2000 echoing the implementation of the *Action Plans 21 for Rejuvenation of Education* in 1998. Regular HEIs, especially the national institutions, have received the greater part of the government's funding, thus echoing the goal of Project 211 and Project 985 to form a few elite "world-class" universities. Local regular HEIs and students enrolled in these institutions remain under-funded. Reduction in public funding for local HEIs may have demonstrated the start of the Chinese government's retrenchment strategy to gradually ease the weight on government finance for all HEIs. The State may eventually retreat from funding national HEIs too.

While there is more public funding invested into higher education system, there is even more funding from the non-government sources pouring in. The increase in public finance spurs up much more non-public funding, which grows at a much faster speed than that of public expenditure itself. The continuous increase in public funding works as a security and incentive to attract far more funding from other sources. It is also anticipated that the higher education expansion in China will lead to large-scale constructions at the institutions, which will further drive up the domestic consumption

(CERNET, 2001 Jan 01a). While more household income is re-accumulated back into the public sector, it is even better that the re-centralized funding from non-public avenues will generate further productivity and consumption in social-economic sectors other than higher education just as the Human Capital hypothesis would suggest.

Data in Chapter 6 also shows that the costs for both building elite universities and expanding enrollments are largely devolved on other non-public players and stakeholders who enter the field of higher education. The majority of funding for public institutions is now from non-governmental resources including individual households, university-run businesses, and private companies. Human Capital Theory recognizes education as development of the private good and legitimizes the Chinese government to redirect the money from non-public sources to support public higher education. In a way, one may argue that this is part of a larger redefinition of the “People’s” involvement in higher education.

It was suggested that a primary driving factor for higher education funding diversification is to reduce governments’ burden of financing higher education (Vidovich et. al. 2007, p. 92). From the Resource Dependence Theory’s point of view, it is the limited funding available to governments and the need to secure as much resource as possible for a sustainable growth of its higher education that lead China to diversify its higher education finance. Indeed the data in Chapter 6 shows that regular Chinese HEIs are now financed with much more funding from a much more diversified group of providers.

As mentioned in Chapter 3, China achieved mass higher education in 2003. China's higher education finance also completely entered into the era of funding diversification as Mass Higher Education Theory predicts.

The four different types of HEIs observed in Chapter 5 and 6 do not reflect a unified characteristic across institutional types. In general, the national research institutions are China's focus to achieve international recognition of prestige and the local level universities and colleges are responsible for satisfying the public demand of more post-secondary education opportunities. At the surface, it looks like that China is trying to do whatever it can to provide more educational opportunities to its citizens. Yet, China's major higher education policies reviewed in Chapter 5 heavily favour a few elite universities. The statistical data in Chapter 6 also shows that building elite institutions, which appear to be large research institutions operated at national level, weighs heavier on the government's agenda than providing higher education to as many people as possible. NRUCs now receive more funding both from government and non-government sources. There is a funding stratification between national and local level HEIs. Differentiation between regular HEIs and adult HEIs was also formed during the funding diversification process as demonstrated by the data in Chapter 6.

The Mass Higher Education hypothesis does not explain the above-mentioned stratification and differentiation. It can explain the increase in funding from various sources for the growing number of institutions at provincial and municipal levels as a

means to satisfy China's mass higher education achievement. However, the NRUCs have received increasingly more funding from all sources despite the decrease in number and their minimal effect in solving enrolment expansion problems. More and more funding has been allocated to these institutions in order to create world-class institutions. A rather small number of elite students are enrolled in these institutions compared to the local institutions, which are at the forefront in meeting the need of mass higher education. The funding available per students for national regular HEIs is more than that for any other type of institution. Resource Dependence Theory does not appear to account for the stratification either. From Chapter 5 we learn that Chinese policy makers recognize that in today's international competition, human capital and advanced technologies are crucial to a country's success, as Human Capital Theory indicates. China's approach to invest a great amount of resources in a small number of institutions is to serve exactly the purpose of producing highly qualified human capital as well as gaining a competition edge in a short period of time.

In brief, the above theories do not seem to adequately explain the mismatch between China's socialist political system and diversified finance for higher education. At this point, it is possible to argue that Social Constructivism not only explains why China adopted the dramatic funding reform for higher education but also legitimizes the fundamental mismatch between China's funding diversification and its socialist ideology.

As indicated in Vidovich et al. (2007), China's HEIs are increasingly open to the



influence from the global environment of economic integration, domestic market reforms, and expanding cross-national academic exchanges. Some supranational agencies began to play an increasingly significant role in promoting a market ideology in China by providing donations and loans. Parallel to the above international changes in the philosophy of governance and higher education management, there has been a strong trend toward diversification and decentralization in China's higher education as well.

Although China is not an OECD member country, its higher education policies are strongly influenced by the global norms set by OECD, as we have clearly seen from the major higher education policies reviewed in Chapter 5. Currently, public universities and colleges in China are funded through four income streams: 1) a per capita allocation made by the government for national and provincial institutions; 2) additional government funds provided to the top universities under Project 211 and Project 985; 3) tuition fees fixed by provincial governments; and 4) additional revenue the institutions are able to generate from complementary teaching, research and other activities such as university-run enterprises, endowment and social donations (OECD 2005, p. 552). These means of funding diversification fall well in line with the forms of higher education finance in effect in many OECD countries.

The value and contributions of advanced research institutions to the society are globally acknowledged. As a result, the Chinese government makes great investments to establish a few elite institutions that can measure up to the western standard of world-class

universities. This explains the differentiation and stratification among various Chinese HEIs.

It appears that the world culture and global norms shape China's domestic policies in higher education. It also appears that there is room for the Chinese government attributes to adapt these norms to the country's specific environment and culture to suit China's socialist State ideology.

The present discussion leads to the conclusion that while Human Capital Theory, Resource Dependence Theory and Mass Higher Education Theory focus on the domestic factors within China, they do not provide adequately account for mismatch between state ideology and structure and funding diversification which is increasingly based on non-government sources. In contradistinction, Social Constructivism considers the international influences within which Chinese funding restructuration operates. It draws attention to various global norms, which account for the discrepancy between state ideology and structure and funding diversification in ways, which illustrate the multifaceted intersections between domestic and international policies in the field of higher education. This approaches posits that internationally accepted norms are eventually adapted domestically, to accommodate China's socialist structure. Yet, it remains to be seen to what extent can this accommodation continue without leading to a broader questioning of the domestic policies involved.

## **CHAPTER 8:**

### **IMPLICATIONS AND REFLECTIONS ON FUTURE RESEARCH**

#### **Implications of the Study**

The present study provides insights into the funding reform of China's higher education from diverse and competing theoretical perspectives.

Although the government still maintains a relatively high level of administrative control over HEIs, the financial freedom of the institutions is considerable. Further reform of higher education governance is only a matter of time. It is foreseeable that in the near future, the government will need to justify its power over the institutions given their high level of financial independence. Moreover, various stakeholders that contribute large amount of funding to the institutions will request to have a voice in the decision making process of the institution. Universities are encouraged to establish enterprises using their research advantage. Some of the university professors are also entrepreneurs in university run companies. Sooner or later this could influence research and teaching in the universities. The engagement of multiple stakeholders in funding will require a more democratic process in the management of the institutions e.g. the selection of the president and the power the Party secretary holds. There will also be demands from students, for improved quality of education and equality in access. The regional enrollment quota policy will also have to be revisited in order to address the demand of

higher education opportunities, which are more equally distributed to all. Thus, many challenges lie ahead, and these have not been fully addressed in this study.

### **Reflections on Future Research**

Clearly this study can only serve as a starting point for many future endeavors in the area of higher education finance and policy in China. The incoming sources of funding studied here must yet be more fully explored. Is it all pre-determined by the government or the institutions are just offered a total amount of money to be used freely as they want? Is there a difference between funding allocated to different fields of study? What implications and perhaps powers may a company have when it gives the institution a huge amount of funding? Whether or not the composition of the non-government funding sources is sustainable can be crucial to the long-term development of China's higher education since non-government funding has become the major contributor of higher education finance.

Four general categories of institutions were used in the analysis of the funding system. However the specific institutions can be studied as individual cases as to how their funding structure and amount of resources have changed over the years and how this process has affected their internal governance structures. The study of individual institutions may provide more information on the dynamics and tensions between the different institutions in terms of amount of funding, number of students enrolled, level of

research achievement, employment rate of graduates, quality of the facilities and so on. Is preference given to specific fields of studies over others? What are the approaches each individual institution may take to fight for the limited funding and to receive the best support from government and non-government resources? Also, it would be worthy to explore funding issues in relation to the students enrolled in the different institutions and how this is reproducing solid stratification among students from different provinces, regions and urban/rural areas. Which groups of students are the most disadvantaged within this new funding scheme? How are inequalities between urban and rural areas maintained under the new funding regime?

China's higher education policy and funding diversification emphasizes the creation of top world-class universities. China pledges to have a number of world-class universities in the 21<sup>st</sup> century, but what is the standard for "world-class" universities? Mohrman (2005) argues that the major factors involved include 1) Excellence in research; 2) excellence in faculty, students, and facilities; 3) academic freedom and institutional autonomy; 4) consistent and substantial public financial support; 5) cultural values; and 6) visionary mandate. A world-class university is about intellectual exploration and creativity, and a focus on the long-term role of universities in the society as well as the short-term contributions that institutions to the society. An internationally recognized scholarly ethos, however, may take generations to develop. Simply buying State-of-the-art equipment or pushing for more publications will not necessarily

guarantee the kind of intellectual atmosphere that has developed over centuries in western universities. Thus further research will have to explore the emerging meanings of quality and excellence in China and how such concepts shape higher education policies and practices.

### **Concluding Statement**

Although China is still relatively new to WTO, its efforts to engage in global economy will only intensify the market-orientated policies in higher education (Vidovich et al. 2007, p.93). The interaction between China's domestic politics and the global economic policies is bringing profound changes to the Chinese culture and society including higher education.

The current policies and statistical data suggest that China's higher education funding diversification process is still focused on national (domestic) sources of funding. Foreign investments have not yet been brought into the Chinese higher education system. International educational organizations may be able to invest to build campuses, offer degree programs, and supply other academic resources to the Chinese society in the future. It deserves to be noted that the World Trade Organization (WTO) agreement, of which China is part, allows member countries to participate in each other's higher education system. How would this play out, eventually, is yet early to determine. Yet such a possibility raises further questions regarding the path along which the funding of

China's HEIs is moving.

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