

ISSUES OF INEQUALITY  
UNDER CHINA'S HIGHER EDUCATIONAL REFORM:  
URBAN-RURAL AND STRATA DIFFERENCES IN ACCESS

A Thesis Submitted to the College of  
Graduate Studies and Research  
In Partial Fulfillment of the Requirements  
For the Degree of Master of Arts  
In the Department of Sociology  
University of Saskatchewan  
Saskatoon

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## ABSTRACT

Issues of educational inequality have been hotly debated in China ever since the higher educational reform in the late 1990s. High tuitions and the privileged access of advantaged groups are attracting more people's concerns. This thesis examines the current status of Chinese student access to higher education in the post-reform era, and explores the urban-rural and strata differences among students with different social origins and family backgrounds. The expansion and tuition reform of Chinese higher education not only poses financing college as the biggest difficulty for those disadvantaged groups, but also perpetuates the established social hierarchy. This thesis finds that, despite the progress made in equalizing access by urban-rural and strata origins at the mass higher education era in China, disadvantaged groups remain their unfavorable status in accessing higher education, as compared to their counterparts who are economically, culturally, and socially superior. The initial quantitative access differences are gradually turning into qualitative disparities, the higher the demand for the university or/and major, the more urban and higher socioeconomic students enroll. The theories of financial, cultural, and social capital were employed in the thesis and provide a plausible explanation to the continuing disadvantaged status of poor groups. The methodology used is mainly a quantitative technique that resorts on a variety of secondary data, such as national and provincial yearbooks of educational statistics and census, large sample surveys, and case studies from previous research. The findings will have many policy implications concerning the expansion, financing, and affordability of higher education in China.

## ACKNOWLEDGMENTS

As to be the first graduate Master in the joint-training dual master program, I must express my big thanks to a great number of people at this moment. First and foremost I should acknowledge my thesis supervisor Dr. Li Zong. I wouldn't have this precious opportunity to study in University of Saskatchewan without his earnest effort. Moreover, he is such a generous person that not only guided and advised me academically in the past year but took care of my daily life as well. For me, it's a great honor to be his student. I'd also like to thank our department Head, Dr. Wotherspoon, another committee member for his wise and time. Furthermore, my thanks go out to department of sociology, University of Saskatchewan for their generous financial support during my study in Canada. The fellowship and support of my sociology colleagues are invaluable to me. I also have to thank Dr. Jinggang Zhao for being the external examiner of my thesis.

I must also acknowledge all the faculty members in department of sociology, Xi'an Jiaotong University. Thanks for their choosing me as candidate in this joint-training program and further recommending me to be the only awardee among graduates in the College this year for the recognition as Province-Level Student for Academic Excellence. I particularly want to express my gratitude to Professor Hongbo Wang, my supervisor in Xi'an Jiaotong University. I still remember all your benedictions and expectations on me before I study abroad. Those words are always in my mind and have become my motivation here. Finally, I extend my gratitude to my friends, Jin Di, Yousun Hu, Yuanping Ma, Yaping Zhou, Qing Liu, Qianru She, for their informative counsel and advice, as well as their kind help to my life.

## Dedication

I would like to dedicate this thesis to my dear parents who give their selfless and deepest love to me all the time. My wise dad, a humorous professor with full of wisdom; my lovely mom, a virtuous doctor with the biggest love in the world, you were, are and will always be my sun in my life path. I hope you both would feel proud of your only daughter when she really grows up.

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## ACRONYMS

NCEE ---- National College Entrance Exam

## CHAPTER 1 INTRODUCTION

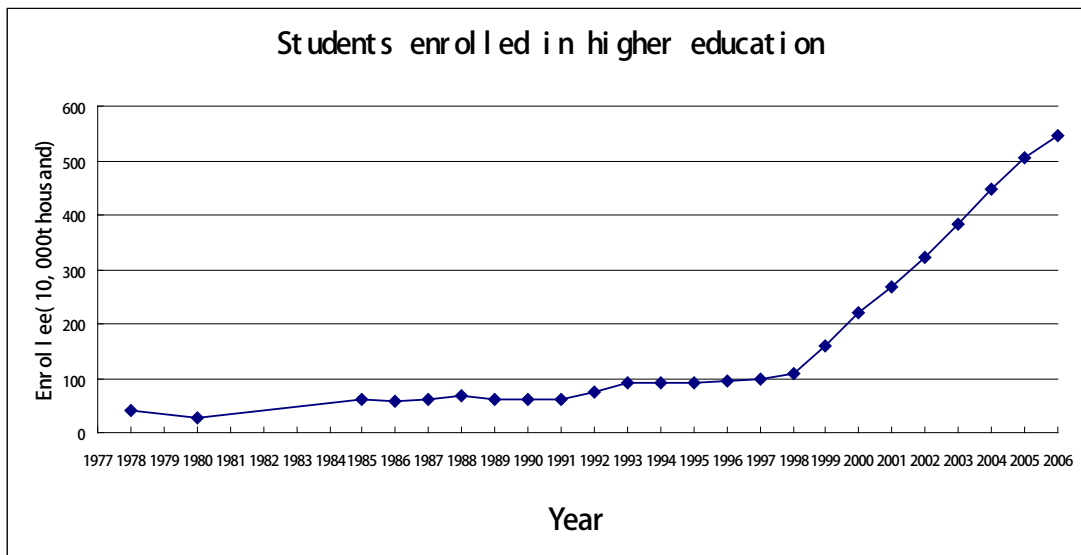
### 1.1 Introduction

Education in China, especially higher education, has much more significance than in Western countries. Following the impact of Confucianism for thousands of years, taking NCEE (National College Entrance Exam) then receiving a postsecondary education has come to be regarded as the most effective and efficient way to improve one's future life chances. In New China, university students were labeled as a "*child of fortune*" — because in 20<sup>th</sup> century, along with increasing interdependence between economic growth and science and technology development, experts with knowledge were placed in high positions; hence owning a postsecondary credential was deemed to be a competence fiercely competed for (Robinson, 1981). In such a "credential society", demands by the masses for higher education soared to unprecedented heights, in sharp contrast to the limited resources available. In consideration of universal social demands for educational expansion and financial deficit in universities and colleges, tertiary education has experienced a rapid transfer from an elitist to a populist model in the past half century worldwide (Johnstone, 2003). China has also gone through this change, with its expansion beginning at the end of the 1990s.

China's educational reform has increased university capacity to unprecedented levels, which has been most evident in a constant rise in undergraduate enrollment rates. China, with 23 million students in domestic higher educational institutions, now ranks first in absolute numbers in the world (Yuan, 2006). As a result, the severely competitive situation in NCEE has been alleviated more or less since China in 2002 reached the goal of "mass education" ahead of its

targeted policy schedule (Xia, 2008). However, together with huge expansion, burgeoning tuition fees have become heavy burdens to many families. A “Chinese households’ living standards” research project conducted in 2005 indicates that expenditure on education is the primary reason contributing to poverty both in urban and rural areas (Yang, 2006). Moreover, as schooling becomes normative, it loses its scarcity value: it is likely that recent changes in educational finance affect the quality of education as well as access to school, which is manifested in student unemployment after graduation (Xia, 2008). Therefore investment in higher education is no longer as good as gold in some people’s eyes.

Figure 1.1: Students Enrolled in Higher Education, 1978-2006



Source: Data retrieved from China Statistics Yearbook 2008.

Table 1.1: Growth Rates of Chinese Higher Educational Tuition Fees, 1997-2004

Year	1997	1998	1999	2000	2001	2002	2003	2004
Growth rate	24.82	21.20	63.64	56.51	43.19	37.60	27.15	21.70

Source: Brandt, R. (2008). *China’s Great Economic Transformation*. Cambridge, NY: Cambridge University Press, 223.

Since China first activated tuition fee reform in all public higher education institutions in 1997, tuition fees have gradually become the essential component in university revenue. At present, over 30% of the total operational budgets of Chinese higher education institutions are covered by tuition fees. Initially, fees stagnated around 3,000 yuan and common people could afford it. However, concomitant with dramatic expansion policy in 1999, tuition fees burgeoned by 15 percent in 2000 over 1999 basis (in some places even increased 20 percent) (Yang, 2006).

There is a global trend in undertaking financial reform for higher education with the rationale of cost sharing (Johnstone, 2003). Financial decentralization has some merits in mobilizing the previous undeveloped higher education resources and encouraging innovation, but consequently has widened the socioeconomic disparity in educational attainment based on natural endowment and comparative advantage (World Bank, 1997). Starting from 1997, the fees charged by higher educational institutions began to exceed the per capita net income of rural residents, and this growth trend continued in the next few years. The average tuition fees in 1997 were equivalent to 48.5 percent of the disposable income of urban residents, and then by the year 2000 rose to 76.4 percent (Shen, 2004). Obviously, higher educational tuition fees have already become onerous burden for ordinary citizens, especially for rural residents to bear.

The existing controversy in China about the impact of cost-recovery policy, in terms of joint application of tuition fees and financial aid, is on issues of equality and efficiency. While lower-income families are relatively more negative and risk-averse towards loan burden than higher-income families, they also confront more difficulties in lending money from banks due to their economic status. Therefore, a financial system consisting mainly of tuition fees and loans may hamper college attendance for students from economically disadvantaged groups.

In the period (before reform) when receiving tertiary education was almost free, rural students could become college enrollees through their conscientious studies even though the system itself was highly selective. At that time China's public higher education system represented a significant catalyst for social mobility to some extent. But since charging significant tuition fees, especially when no credit mechanism for borrowing has been established, college entrance opportunities have been denied to poor students. Even worse, the potential higher educational financial burden on families may reduce demands for secondary education in poor rural regions, which in turn hampers the overall average rural educational attainment (The Project Group, 2001). Consequently, poverty is perpetuated. By contrast, students from families of high socioeconomic status are already over-represented in the college student population (Li, 2007).

## **1.2 Research Questions**

Issues of educational inequality have been hotly debated in China ever since the higher educational reform in the late 1990s. Critics of high tuitions and industrialization of education are attracting more and more people's concerns. Therefore ideas of equality of education and balancing development have gradually gaining public favors in mainstream educational policy.

On the one hand, after the reform, China's higher educational enrollment rate has increased from 9.8% in 1998 to 19% in 2004 (China Statistics Yearbook, 1999, 2005). One can't help but wonder, as is my first research question: with all the progress made in equalizing access by urban/rural family origin at the mass education level; and in light of the expansion and development of higher education in recent years, especially since 1999, are rural students still a particular disadvantaged group in accessing higher education compared to their urban counterparts? The investigation onto this question consists of Chapter 4 in my thesis. It explores urban and rural access opportunities from perspectives of pre- and post-reform era, differences by provinces and student distributions in the system.



On the other hand, as previous Chinese studies on educational inequality seldom paid special attention to strata differences, it seems like differences in higher educational access that resulted from socioeconomic disparity were largely overshadowed by the huge urban-rural gap. However, recent research (Xiao, 2003; Wang, 2005; Yang, 2006) indicated that besides the widening urban-rural gap, strata differences in the Chinese educational system are becoming more obvious since education reproduces social hierarchy. This result coincides with many other developed countries, in which advantaged groups with more economic, social and cultural capital receive benefits in the education system whereas disadvantaged children are often situated in inferior positions. Modern education seeks to eliminate limits on educational opportunity resulting from family background. Therefore it is essential to study and properly evaluate the objective strata differences in Chinese education as well as its causes and influences. In this way, my second question asks, whether such strata differences exist in Chinese higher education, and if yes, how and by what means do they reflect? Chapter 5 is mainly about answers to this question. The changes in undergraduate family backgrounds, the distributions of students in various school and major types, combined with their distinct enrolled NCEE scores have presented current problems in the post-reform era of Chinese higher educational system.

In brief, the thesis examines the current status of Chinese students' access to higher education after reform, especially the existing urban-rural and strata differences among students of different family background and social origin. It is my hypothesis that theories of economic, cultural and social capital can suggest a plausible explanation to the persistent, or even worsening, inequality faced by disadvantaged students from rural areas or/and with low socioeconomic family backgrounds in their access to higher education.

The purpose of the study is to examine the phenomenon within the context of higher educational expansion and tuition reform in China so that we can better understand the problem and raise the awareness of scholars and policy-makers. In the long run, this thesis will hopefully provide a foundation for future research that is more detailed, geographic and ethnically specific; and promote the accessibility of higher education to disadvantaged groups either from rural areas or from low socioeconomic strata.

### **1.3 Significance of the Study**

In recent decades a new group called “critical theorists” question the availability of chances for low-status individuals to find opportunities. Explanations of stratification have been developed from the idea that the upper-middle class “conspires” to perpetuate their own class interests by limiting access to educational opportunities for other groups. These theorists (Apple, 1993; Giroux, 1994) argue that the under-classes are channeled into poor secondary schools, community colleges, vocational schools, and lower-level jobs. In the process, schools give knowledge to poor and minority children that make them accept failure in school, poor occupational status, and the dominant culture.

With the notion that formal education is an economic investment that pays dividends by creating and building upon human capital, it is as “good as gold” both in terms of upward mobility and increased earnings for the individual graduate and in terms of fostering national economic growth beneficial to the public in Chinese people’s eyes. But the contradiction between the speedy implementation of higher educational expansion and tuition policy, and the slow increase in higher educational institutions’ academic capacities and residents’ income has influenced disadvantaged students’ opportunities to get access into the system.

The problem becomes more complicated since some scholars (Wang, 2005; Yang, 2006; Li, 2007) further conclude that even the enrollment gap is narrowing as the consequence of

expansion, the new inequality in Chinese post-reform higher educational system is manifested in quality differentiation among institutions and disciplines. The standards of tuition fees that a school charges, and the potential financial aid for poverty a school offers, together with student's own economic, cultural and social conditions restrict student's choice of school and academic field to a certain extent (The Project Group, 2001). As a result, students from advantaged groups with more economic, social and cultural capital are said to disproportionately enroll in upper-level universities and more highly valued disciplines, whereas the disadvantaged are forced to choose universities and disciplines of relatively less prestige and demand (Yang, 2006).

The findings will have many policy implications concerning to the expansion, financing and affordability of higher education in China. During my thesis writing process, I feel intensively that research and decision making of China's educational public policy not only fall short of the popular mandate but also require an essential data basis. That is to say, the establishment of national and local educational databases will definitely improve the publicity of educational information. It should be a critical agenda for future higher educational reform.

Restricted by self research capacity and energy, some discussions in the thesis are just cursory and superficial. Thus lots of issues concerning educational inequality are not mentioned enough this time, which need further advanced study. Nonetheless, the thesis is intended as an inspiration to provide basic experiences to the late-comers.

## CHAPTER 2 LITERATURE REVIEW AND METHODOLOGY

### **2.1 Social Stratification and Educational Inequality**

One of the basic themes in sociology of education is the assessment of contributions made by formal education both to social inequality and to socioeconomic opportunity (Wotherspoon, 1998). Karl Marx, father of conflict theory, felt that educational systems perpetuate the existing class structure. When the type of education and knowledge available to various groups of people is controlled, their access to positions in society is controlled. Thus, the educational system is doing its part to perpetuate the existing class system – to prepare children for their roles in the capitalistic, technological society, controlled by the dominant groups in society.

The general level of education people attain in a society is often regarded as one of the important comparison indicators of social and economic development among countries. Higher education has expanded rapidly around the world in the past half century. Some theoretical questions are often asked, such as why and what are the results? Also, access to higher education has caused another theoretical debate on whether some groups have greater opportunity than others to enroll.

Traditionally, education is viewed as one of the most important channels of upward mobility for individuals and groups. It is known as one of the most crucial factors that determine occupational status, class hierarchies, and income, as well to gain access to power and control. However, conflict theorists have questioned its reality, argue that education is structured to serve the needs and perpetuate the advantaged position of the elite, which causes social stratification (Bowles & Gintis, 1976; Bourdieu & Passeron, 1977; Featherman & Hauser, 1978).

Members of social classes share socialization, which leads to traits such as common language, values, lifestyle, manners, and interests. These “status groups” distinguish themselves from others in terms of categories of moral evaluation – honor, taste, breeding, respectability, propriety, cultivation. Each group struggles for a greater share of those parts of society that make up “the good life” – wealth, power, and prestige – and it is because of this competition that conflicts exist. Some look to education to reduce inequalities, but according to conflict theorists, education in fact serves to reproduce the inequalities based on power, income, and social status (Carnoy, 1974). The values, rules, and institutions of society reflect the interests of the dominant groups, the ruling class; this is seen in the institution of education in the way resources are distributed (Scheurich & Imber, 1991). Thus, education is no exception.

Therefore it is argued that individual’s educational attainment depends strongly on socioeconomic status of his/her family; and schooling is not only a primary means for upward mobility but also a critical mechanism that passes social inequality from generation to generation. The social phenomenon of inequality in education is mostly manifested in unequal access to schooling. This result is partially from unequal ability, motivation and aspiration, and brings unequal privilege, resources, prestige, and attainment in one’s future consequently.

Research in social stratification often falls into two areas, inequality of opportunity and inequality of condition. While the former emphasizes the liberal goal that individual’s personal attainment should not be related to certain ascribed characteristics of social origin, the latter is concerned with the distribution of differential rewards and living conditions, either the distribution of scarce goods or in relation to different inputs (effort and time) or rights (citizenship or employment). The distinction between these two kinds of inequality is not clear cut, but studies of inequality of opportunity are typically about educational attainments and

social hierarchy (such as occupational status or social class) and how these qualifications are associated with ascribed characteristics, while studies on inequality of condition are concentrated on income differences or differential rewards in labor market or other larger distributional systems (Breen & Jonsson, 2005).

The concept of inequality of educational opportunity usually indicates how much an individual's education attainment is affected by his/her family's socioeconomic background but not by ability or efforts. The focus on origin-education relationship is not only because this kind of education inequality is one dimension of stratification per se, but also by reasons that future occupational or income inequality, which may be the result of educational attainment, cannot be easily justified if educational attainment is heavily determined by family origin.

Educational inequality is shaped by various factors in multiple dimensions. It derives from dynamic relationships between family decisions on education (demand) and the provision of educational opportunity (supply). In the abundant literature on educational stratification, family and school are the most studied social institutions (Coleman, 1968; Peaker, 1971).

The literature on family and educational inequality has witnessed a rich array of perspectives and theories from sociology to economics, but family is regarded as the most consistent social predictor of micro educational inequality over time and across societies. In the seminal works of Coleman (EEO Report, Coleman, 1968) and Blau & Duncan's study of American stratification (Status Attainment Model, 1967), family background effects are of more important than school factors in producing educational inequality. Among empirical studies of educational inequality, at least three frameworks are commonly used: prestige scales, socioeconomic indices (SEI), and social class typologies (Erikson & Goldthorpe, 1992; Wright, 1997; Hauser & Warren, 1997). All these frameworks tend to use occupational information, such as employment status, sector

(e.g., to distinguish farming), expertise and so on as their backbones in analysis. Many well-cited empirical studies have utilized large-scale cross-sectional surveys to examine the role that family plays in the process of educational stratification (Blau & Duncan 1967; Featherman & Hauser, 1978; Shavit & Blossfeld, 1993; Rijken, 1999; Shavit, Arum & Gamoran 2007).

In recent years, the most robust findings of stratification research are that origin effects are stronger at earlier than later educational transitions; that education mediates a substantial part of the association between origins and destinations; that women display more social fluidity than men; and that the pattern of social fluidity is overwhelmingly shaped by inheritance, hierarchy, and sector effects (distinguishing, in particular, farm from nonfarm sectors), although the relative importance of each of these has been debated (Breen & Jonsson, 2005).

However, previous researchers were largely limited to industrialized countries until Stephen Heyneman (1976) published his “Coleman Report for a developing country”, in which he found family background to be less important than school factors in determining academic achievement in Uganda. In subsequent research, Heyneman and Loxley (1983) generalized findings from other developing countries and concluded that family background attributes contributed much less than school quality to the portion of the variance in achievement, in developing versus industrialized countries – “the poorer the country, the greater the impact of school and teacher quality on achievement”. Nevertheless, significant evidence is shown that family factors, such as socioeconomic status, family size and structure, and family decision-making process are all important for educational outcomes in the developing world. Numerous studies indicate marked disparities in enrollment and attainment associated with socioeconomic status (Sathar & Lloyd, 1993 for Pakistan; Patrinos & Psacharopoulos, 1996 for Bolivia and Guatemala; Hannum, 2000 for rural China; Stash & Hannum, 2001 for Nepal).

For example, Filmer & Pritchett (1999) analyzed the “wealth gap” in education in 35 countries in their systematic cross-national research. These countries are located in Africa, South Asia, East Asia and the Middle East. The results revealed substantial cross-country variation in the differences between median years of school attained by students in the top 20% in contrast to the bottom 40% of the wealth distribution. All countries, except Kazakhstan, displayed a difference between rich and poor children’s attainment, where the largest wealth gap emerged in the countries of South Africa.

Two interpretations of this evidence which are not mutually exclusive are put forward by Carneiro and Heckman (2002). On the one hand, the gap originates from difference in academic ability due to long-term factors associated with family background, which refers to cultural capital; on the other hand, it is caused by short-term family financial barriers that limit their ability to afford related expenditures on education, which were determined by family social and economic capital.

## **2.2 Financial, Human and Cultural Capital**

A substantial portion of socialization research focuses on relationships between the position of the family in the social hierarchy and the benefit linked to a student’s educational career. Families differ in the resources available to them for supplying their children with qualifications that will enable them to participate successfully in education. That is to say, the means available within the family are regarded as the intermediate factors between family background and the student’s educational achievement. To be specific, the “resources” or “capital” – these mediating variables available in the family – are measures of various mechanisms that may influence academic attainment. In fact, research (Tinto, 1987; Coleman & Hoffer, 1987; Porter, 1990) clearly shows that four factors consistently influence academic success in education: (1) financial resources (financial capital), (2) academic resources (human capital), (3) cultural resources



(cultural capital), and (4) social resources (social capital). Student academic success is a function of previous academic achievement and the academic quality of school, and the amount of financial, cultural and social resources that they receive either from the home or the school or both.

The first and most common explanation put forward for discussing factors that affect educational outcome is financial resources, which consist of the financial and other material means available to a family that can be allocated to education. In its strict sense of the word “capital”, the higher the educational and occupational level of the family, the higher the budget for educational expenditure.

Another concept often referred to in educational research is human capital, which includes the knowledge, skills, and capabilities that enable an individual to act more effectively. One of the most important developments in the economics of education in the past years has been that the concept of physical capital can be usefully and easily extended to include human capital (Schultz, 1961; Becker, 1964; Mincer, 1974). Physical capital includes land, tools, machines and other productive equipment. The possession of physical capital facilitates the production of goods and services. Initially, physical capital is created by working with materials to produce tools, machines, and fertile land. Likewise, human capital is generated by educating and training people to provide them with skills to increase their productivity. Hence, human capital is the possession of knowledge and skills. Schools are the main social institutions for creating and maintaining human capital. Physical capital and human capital are alike in that decision making is based largely on the expected rate of return from capital investments. Measured in terms of the parents' education, this kind of capital (also called “scholastic” capital) can make a substantial contribution to a favorable starting position for children to participate successfully in education.

A concept closely related to human capital is cultural capital – the cultural resources possessed by individuals with varying degrees of human and physical capital (Bourdieu, 1987). Although the concept of “cultural” capital was not widely accepted until the 1970s (Bourdieu and Passeron, 1977), much socialization research in past decades trying to explore educational inequality resorted to its explanation power. This approach attempts to explain the relationship between school success and family background by pointing to the cultural knowledge and attitudes of families that benefit a successful educational career. The motivational qualities of the parents, the linguistic characteristics of the family, and participation in cultural activities and reading behavior are examples of such cultural resources, and these differ according to social status (Bernstein, 1971; Kohn, 1977; DiMaggio, 1982).

These cultural advantages, which are held by people of high rather than low socioeconomic status, include tastes in furniture, home decorations, and the arts, as well as the capacity to appreciate and participate in certain high-status cultural experiences such as lectures, symphonies, and art exhibits. The idea of cultural capital is usually employed as an explanatory variable in attempting to describe exactly *how* social class influences life outcomes (Lareau, 1989; Cookson and Persell, 1985; DiMaggio, 1982). Bowles and Gintis (1976) argue that schools are agencies for “reproducing” the social relations of production necessary to keep capitalistic systems working:

*“The social relations of schooling and of family life correspond to the social relations of production, allowing some students more ‘cultural capital’ to be successful both in school and after, while others lack this advantage. They are reproduced in the schools in a way that tends to reproduce the social class structure later.”*

Research has shown that the link between the socio-economic background characteristics of students and their educational performance can be partially explained by the extent to which their families have cultural capital at their disposal (de Graaf, 1989). In a study of American

educational structures and reproduction of the “mental-manual” divisions of labor (or intellectual, white-collar class versus the “working class”), Colclough and Beck (1986) found that “students from manual class backgrounds are over twice as likely to be placed in a vocational track” and from there are channeled into manual class jobs.

### 2.3 Social Capital

Although more like an extension of financial, human and cultural capital, social capital as the fourth type of resource has recently attracted more attention. Central to this approach is the notion that families differ not only in the extent to which they possess human and cultural capital, but also in their access to resources that resides in social relationship (Coleman, 1988). The so called “functional communities” feature relatively closed networks of mutual social relationships between generations and a dominant value system that is closely linked to the social structure. Parents who know one another and their children and other persons from the children’s social environment are main components of such a closed network.

As Coleman and Hoffer (1987) argue:

*“If physical capital is wholly tangible, being embodied in observable material form, and human capital is less tangible, being embodied in the skills and knowledge acquired by an individual, social capital is less tangible yet, for it exists in the relations between persons. Just as physical and human capital facilitates productive activity, social capital does as well.... Students’ families differ in human capital, as, for example, measured in years of parental education. And research shows...that outcomes for children are strongly affected by the human capital possessed by their parents. But this human capital can be irrelevant to outcomes for children if parents are not an important part of their children’s lives, if their human capital is employed exclusively at work or elsewhere outside the home. The social capital of the family is the relations between children and parents (and when families include other members, relationships with them as well). That is, if the human capital possessed by parents is not complimented by social capital embodied in family relations, it is irrelevant to the child’s educational growth that the parent has a great deal, or a small amount of human capital.” (pp. 221-223)*

Thus, social capital consists of relationships between adult family members (parents, grandparents, aunts, uncles, guardians) and children. The presence of some adult members in the

family unit is a necessary condition for providing social capital. The presence of adult family members in the household is the cornerstone for this sort of capital. The key is intergenerational communication, or simply providing “care” for children. Unlike financial and human capital where personal investment leads to an increased productivity of the self (in terms of educational and occupational achievement, fame and fortune), social capital is an investment in the productivity of others. Social capital is a parental outlay (investment) utilized as an input by children toward the production of their own financial, human, and social capital. Coleman (1988, p.119) calls this the *public good aspect* of social capital: “the actor or actors who generate social capital ordinarily capture only a small part of its benefits, a fact that leads to underinvestment in social capital.”

Though popular in recent studies, however, Coleman’s social capital is not “new”. There have been other sociologists before mentioned the role of social resources in the reproduction of social inequality (Loury, 1977; Woolcock, 1998). Moreover, Bourdieu should be mentioned in particular. He defined social capital as “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition” (Bourdieu, 1985). In contrast, Coleman defines social capital in broader terms as “a variety of entities with two elements in common: they all consist of some aspect of social structures, and they facilitate certain actions of actors – whether persons or corporate actors – within the structure” (Coleman, 1988). Though definitions differ, a common characteristic of them is the notion that it “stands for the ability of actors to secure benefits by virtue of membership in social networks or other social structures” (Portes, 1998).

Family-based capital is one major aspects of social capital. It often refers to resources that become accessible, through the relationships that individuals maintain with each other (Lin,

1982). It is in many cases regarded as consisting of networks of social relations that may be effective for purposes of resource allocation. Thus the effect of social class on educational outcomes can then be understood as the higher socio-economic classes having more opportunities to use their network to achieve better education for their children. In this network approach, the production of social capital depends on three factors: the number of individuals in the network willing to help one, the strength of the relationships, and the nature of the resources these individuals may provide access to (Flap, 1995).

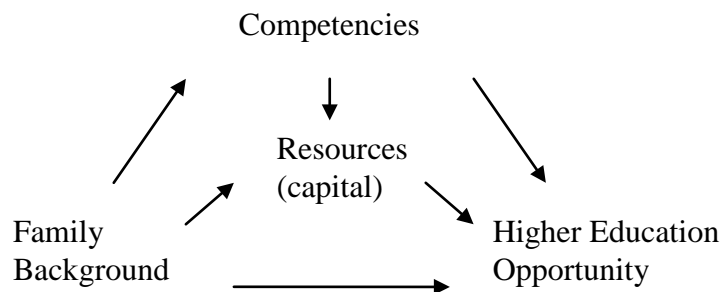
## **2.4 Theoretical Framework**

The theories of financial, cultural, and social capital will be tested in the thesis and provide a plausible explanation to the continuing disadvantaged status of poor groups. Schools alone cannot cause or cure problems resulting from the stratification system, since they are but one part of a total, integrated system. Thus, to understand the role of schools in the process of stratification one must view interrelationships among schools, family, politics, economics, and other integral parts of society. From a system perspective, we get a general framework for viewing stratification in education (Figure 2.1). The cultural capital concept suggested by Bourdieu, and social capital concept suggested by Coleman are both emphasized in the analysis in order to explain the inequality of educational opportunities, since the effect of social class on educational outcomes can be understood as the higher socio-economic classes having more opportunities to use their economic, cultural and social resources to achieve better education for their children.

Since most authors regard various capitals including financial, cultural and social capital as fruitful theories that may add new insights to knowledge of processes involved in the distribution of educational opportunities and selection and allocation through education, I intend to employ them in my thesis to make a contribution toward the evaluation of these capital

theories and their empirical status in the light of our understanding of educational attainment and stratification processes in Chinese higher educational system. I will present available empirical support for presumed effects of financial, cultural, and social capital on the distribution of educational attainment, as seen in urban-rural and strata difference in higher educational access.

Figure 2.1 Basic Resource Model of Educational Opportunity



## 2.5 Methodology

The proceeding section of this chapter has discussed the theoretical orientation of this study. This section presents the research methodology used in conducting the study. The methodology used is mainly quantitative technique that resorts on a variety of secondary data, such as national and provincial yearbooks of educational statistics and census, large sample surveys and case studies from previous research. My aim is to synthesize those findings of different areas and time so as to provide a more complete perspective concerning educational inequality on urban-rural and strata differences in China's higher educational access opportunity structure.

Due to the limitations on data resources, the quantitative analysis in the study is largely descriptive, which describes the general characteristics of the sample and measures central tendencies such as means, and range for each variable. The empirical study about China's higher educational access opportunity, together with evaluation index and measurement of educational

equality in my thesis are mainly derived from secondary data by former researchers. The analysis is limited by a lack of basic statistical data in China, as well as time and space limits. The existing national educational statistics in China seldom includes measurement from the dimension of equality; moreover, data on urban-rural and gender division are either rare or incomplete, while those on strata differences are totally missing. Thus in my study, in terms of unavailability of data on higher educational enrollment number by provinces, which is essential to my analysis on higher educational access opportunity, I can only replace it with the sign up number for NCEE. In addition, some of my knowledge and judgment are established upon partial and fragmental information. Thus the validity of my quantitative analysis and final conclusion is surely to be affected. In order to make up this deficiency, I've cited many related Chinese studies in my analysis as comparisons to support my conclusion.

My analysis on urban-rural and strata difference in Chinese higher educational access opportunity is largely derived from the most recent twenty years' educational statistics yearbook of China. The yearbook is published by the Chinese Ministry of Education annually, which is based upon forms for reporting statistics from local provincial and municipal governments nationwide. The data input and summary work is done by the information centre of the Ministry of Education. It is divided into several sections: general condition, higher education, secondary education, elementary education, child education, special education, school distribution, educational quality, and scientific research. In terms of its comprehensive and authoritative, it is regarded as the essential reference book for related educational research. However, it doesn't include data from Taiwan, Hong Kong and Macao. I intentionally choose data since the 1990s in order to make comparisons in urban-rural and strata differences between pre- and post-reform eras.

The other sources of secondary data in my analysis mainly come from three large sample national surveys done by previous researchers. As the year 1997 is the milestone in history of Chinese higher educational expansion and tuition reform, Xie's 1998 survey, Zhong and Lu's 1998 survey and Xiamen University's 2004 survey have all functioned as the cornerstones in China's higher educational research concerning reform, which provide relatively comprehensive student information among various school tiers and types, as well as their major distributions. Xie's sample includes 69,258 students from 37 higher educational institutions nationwide, consisting of freshman (1997-enrolled) and senior (1994-enrolled). Meanwhile, Zhong and Lu investigated overall 13,511 undergraduates in 14 universities located in cities like Beijing, Nanjing and Xi'an. The latest one, conducted by the College of Education, Xiamen University in 2004, had 7,264 valid returning questionnaires in total, collected from 34 universities in several major regions. The sampling process emphasized school tier, which includes 8 national key universities, 8 provincial regular universities, 11 public vocational colleges, 3 private vocational colleges and 4 independent institutions. Normally, except for gender and school and major type, these surveys further asked information about student's social strata, parental education and occupational status and his/her family origin. Though this research is not rigid from the perspectives and methodology of sociology and education, it still offers a basis on which to make valuable conclusions for this study.

As to the remaining case studies in my thesis, they're also cited from other scholars' papers and thesis. The purpose is to supplement my argument and provide more detail and specific information on my research topic.



## CHAPTER 3 BACKGROUND INFORMATION OF CHINESE HIGHER EDUCATIONAL REFORM

### **3.1 Higher Education in China**

Issues concerning access to higher education around the globe is who gets into what university, and why. True or not, the belief in most countries is that education is the road to advancement and success. In many societies, the elite do dominate the halls of ivy, and as the opportunity structures change with modernization, others in society are demanding a share of the profits (Ballantine, 1997).

In China, one exam for university entrance determines one's future, based simply on pass or fail. This has created a category of young people in China called "*fudu sheng*", students who failed the exam for the university of their choice then spend an extra year or more studying to retake the entrance exam. However, some students may simply give up the competitive battle for top university placement and go to less prestigious institutions or work; more often these are children of blue-collar workers, thus perpetuating the existing class system (Yang, 2006).

#### **3.1.1 Historical Review of Chinese Higher Educational Reform**

Having a brief historical review on Chinese higher educational reform is necessary before analyzing the issue (World Bank, 1997). Before 1978, enrollments of higher education were under strict control by the central government. Within that era, student received free education and could be assigned a job after graduation. Policy began to change in 1985 so that higher education institutions were allowed to admit students outside the state plan whose NCEE score may be lower, so long as the additional students were either sponsored by themselves or by

enterprises. Further reform in 1992 announced that even state plan enrollees were responsible to pay tuition fees, although far less than enterprise-financed or self-financed students. In fact, enrollment grew by 22 percent in 1994, far above the growth target of 6 percent in the state plan, and a large part of the result was due to the increment in self- or enterprise-financed students. This in part reflected the intense desire of social and private demand for higher education.

Since 1994, policy was revised again and the fees distinction among three financial types of students was almost terminated, as students were charged tuition fees similarly and enrolled under same cutting score. In 1997, public higher education institutions in China began to implement a large scale cost-recovery policy, which means the ending of higher educational dual-track system of public and personal financing. This policy has implications for enrollment, job placement, and student financial aid. Previously, enrollment quotas were set rationally to ensure that eligible personnel were trained with the state capacity to afford their expenditure on training. Once a uniform standard for fees was charged to all the students, the quota restriction disappeared. Consequently, enrollment was driven by the private demand for education, which in turn is sensitive to labor market signals of employment prospects and wages. In this sense, the rise of tuition fees reflects the self-regulating market mechanism.

It generates two negative impacts which need government regulation (World Bank, 1997). On the one hand, institutions are stimulated by incentives to maximize their revenue by expanding enrollment, irrespective of their actual capacity and quality. This resulted in devaluation of higher education credentials as students couldn't find appropriate jobs after being misled into paying an enormous amount of money. On the other hand, the notion of equality of access is violated by burgeoning tuition fees charged. Qualified students who cannot make a payment are forced to give up their education chances.

Financial decentralization has some merits in mobilizing the previous undeveloped higher education resources and encouraging innovation, but consequently has widened the socioeconomic disparity in educational attainment based on natural endowment and comparative advantage. China is not the only country that has implemented a cost-recovery tuition fees reform. There has been a global trend in undertaking financial reform for higher education after Johnstone (1993) advanced his famous “cost sharing” theory. However, the existing controversy about the impact of cost-recovery policy, in terms of joint application of tuition fees and financial aid, is on issues of equality and efficiency. While lower-income families are relatively more negative and risk-averse towards loan burden than higher-income families, they also confront more difficulties in access to loans from banks due to their economic status. Therefore, a financial system consisting mainly of tuition fees and loans may hamper college attendance for students from economic disadvantaged groups.

### **3.1.2 Characteristics of Higher Education in China**

It is worth noting that distinctive institutional features characterize Chinese postsecondary education. First, the institutions of higher education are under control of the Ministry of Education that any significant changes to existing institutions are subject to its approval, and the establishment of new institutions must be approved by the Ministry. Ministry laid out details concerning the organizational structure of the institutions, faculty and student composition, curriculum, and methods of student selection. Although after reform in recent years, universities gain more flexibility in student selection and more independence and creativity in curriculum design, they are still under basic control by the Ministry of Education.

Second, Chinese higher education is driven towards a more socio-economically stratified system. Of the 2,000 or so higher education institutions in China, only about 80 belong to its top tier of national universities, all affiliated with the national Ministry of Education. Although

distributed across the country in the major regions and cities, they are more heavily concentrated in the wealthier coastal regions like Beijing and draw on the most privileged students economically and academically. Below this segment are the vast majority of institutions in higher education, constituting regional, local, and private institutions, each less selective than the national universities. These are usually institutions of second or third choice with family resources limiting students to attend institutions closer to their homes.

Third, the transition from secondary to postsecondary schools is sequential, and there is usually no time break between student's graduation from secondary school and start of their higher education. Even if students fail in NCEE, they often choose to prepare for the next entrance examination. It is difficult for those who entered the labor market to return to the formal and full-time educational system because the NCEE is too competitive and demanding for them. Moreover, Chinese companies seldom hire university graduates who are much older than the normal age of graduating students and the prestige of the institution weighs heavily in competition for jobs. In other words, students and parents must endeavor to obtain the best possible education while there is virtually no chance of entering tertiary education for those who take a job immediately after graduating from high school.

The situations mentioned above suggest the irreplaceable significance of higher education to Chinese households and big human capital loss when someone is excluded from it. Self-financing has become the worldwide mainstream. An individual student must normally support his or her education either by paying before learning (tuition) or after graduation (loan). Besides tuition, the student will have to afford other expenditures such as accommodation, meals, books, and transportation fees. Furthermore, he or she risks the opportunity cost from studying instead of working while receiving a tertiary education. For those students coming from

poor families, only when they obtain the necessary financial resources to support their education will their higher education access not be determined by income levels.

### **3.2 Higher Educational Resources: Deficit and Imbalance**

Since the 1970s, the expansion of higher education and its increasing cost, coupled with the slow increase in public outlays and the worldwide shortage of specific funding has put higher education institutions under considerable financial strain. Further with the emergence of the concept of a “knowledge market” (Stewart, 1998), higher education has become the focus of public attention. Thus reductions in sources of funding for higher education require certain adaptation in organization and management methods in Chinese colleges and universities.

To deal with the situation in order to widely mobilize social forces to maximize economic and social development, the Chinese government has decided to develop higher education firstly by means of the state financial allocation, and secondly by adopting other fundraising policies like charging tuition and miscellaneous fees to students (Shen & Du, 2000). While practice has shown that self-financing policy has worked rather well in solving the serious shortage of education funds worldwide, until now university revenue from tuition and miscellaneous fees in China has become the second main source of education funds after the national allocation (China Statistics Yearbook, 2003). And this will surely have significance for the development of Chinese educational systems.

Since China initiated its higher educational reform in the early 1990s, brilliant achievements could be seen (Shen & Du, 2000). The level of education in the nation as a whole has greatly increased in terms of numbers of people receiving formal education. Also, the rate of illiteracy has decreased significantly. The share of students in higher education is growing continuously, and the number of undergraduates in regular full-time higher educational institutions increased

from one million in 1980 to three million in 1997. Large numbers of highly qualified faculty have been trained for the socialism construction cause.

However, the development of the Chinese educational system faces many difficulties, especially insufficiency of education input and shortage of education funds. These are the main long-standing difficulties that development faces.

### **3.2.1 Insufficient National Education Funds**

The education allocation from the national government constitutes more than 60% of the total national education spending, which is the main source of education funding (Shen & Du, 2000). The proportion of the educational financial input to the GNP is often used to measure the degree of emphasis on education as well as an important indicator of state input level.

When comparing educational financing between China and other countries, statistics (Table 3.1, retrieved from China Statistics Yearbook, 1998) shows that although the absolute value of educational funding budget tends to increase year by year, its proportion in total finance output has remained around 14%. Meanwhile, the proportion in GNP is below 3% and has a tendency to decrease. Obviously, the national educational input cannot keep up with the development of national economy. As to the rest of the world, the China's proportion of educational financial input is not only far below the average level of developed countries, but also lower than the world mean and the average level of developing countries (Table 3.2, retrieved from China Statistics Yearbook, 1995).

Two main factors may explain the shortage of funding and corresponding Chinese government's attitude. For a long time, education in China was considered part of the welfare system but not a productive industry. No one thought that education could contribute to the national economy. With the traditional attitude that budget allocations should first go to production, then to welfare, the educational allocation was consequently relegated to a

Table 3.1 Budget Education Funds in China to GNP and Proportion of Finance Output

	1990	1991	1992	1993	1994	1995	1996	1997
Budget education funds (10 <sup>8</sup> yuan)	410.35	485.39	566.71	691.58	939.15	1083.76	1073.9	1268.9
GNP(10 <sup>8</sup> yuan)	18598.4	21662.5	26651.9	34560.5	46670	57494.9	66850.5	73452.5
Finance output (10 <sup>8</sup> yuan)	3083.59	3386.62	3742.2	4642.3	5792.62	6823.72	7939.55	9233.56
Proportion of education funds to GNP (%)	2.21	2.24	2.13	2.00	2.01	1.88	1.61	2.73
Proportion of education funds to finance output (%)	13.31	14.33	15.14	14.90	16.21	15.88	13.53	13.74

Source: China Statistics Yearbook, 1998

Table 3.2 Proportion of Chinese Finance Budget Attributed to Education in the 1990s in Relation to GNP in Comparison with the Rest of the World

Mean world level	5.10
Mean level of developed countries	5.65
Mean level of developing countries	4.32
Mean level of Asian countries	4.68
China's highest level	2.24

Source: China Statistics Yearbook, 1995

secondary position. Not only was less money allocated, but sometimes education was regarded as a less prestigious department. It was not until the China's reform and open policy in economy that the importance of education has been gradually recognized by the mass. However, under the deep-rooted past image which treated education as a non-productive department, it was hard to increase the government educational budget.

Another important reason for the decrease in educational input is because of the lack of national finance. Since 1979, the proportion of government revenue in GNP has continuously decreased, from 20% in the 1980s to 10% in the 1990s (Shen & Du, 2000), which provides a macro background explanation for the decreasing educational funding. Meanwhile, in a critical moment of China's economy development and educational reform, many projects require urgent investment, which means the preference for short-term benefits rather than investment in education. However, the deficiency of national finance resources cannot be solved in a short

period of time. Therefore, it is absolutely necessary to mobilize social forces by collecting funds in various ways to cover educational costs.

### **3.2.2 Unbalanced Structure of Chinese Education Funding**

What's more, higher education funding suffers from an unbalanced structure. Total funds available for education are split into higher, secondary and elementary education. This "layer" structure reflects the rationalization and degree of optimization to the allocation of educational resources, as more than 22% of budget education funds are being used in higher education (China Statistics Yearbook, 1998).

Generally speaking, the greater the rate of national economic development, the quicker the level of higher education improves. With the increase in the number of undergraduates, the amount of funds for higher education should also be raised. For example, funds for higher education in Japan in 1950 only accounted for 16.2% of total funds for education whereas in 1980 they were 20.2% (Shen & Du, 2000).

Comparatively, the 22% share of higher educational funding in China seems apparently higher. But it was largely attributed to the huge amount of students on campus. As government has allocated a great deal of money onto non-compulsory higher education, the remaining funds are therefore insufficient for primary and secondary schools. Common sense tells us that state education funds should be first allocated to compulsory education then to encourage professional vocational training, so higher education should not take such privileged portion.

As a result, and in consideration of rational allocation of educational resources, certain part of higher education funds must be redistributed to secondary and elementary education. In this way, the lack of higher education funds would become more severe and further the development of higher education would be restricted. Thus in order to effectively lessen state financial pressure, charging tuition fees and industrializing higher education seemed to be the only solution for the



government. In 1996, after several years of pilot tuition policy, tuition fees had already accounted for 20% in higher educational operating expenses, and the proportion kept increasing year by year (Shen & Du, 2000). As a result, it has become an essential financial source in higher education besides government input.

### **3.3 Rationale of Reform: Cost Sharing Theory**

Cost sharing in higher education refers to a shift in the burden of higher education costs from being borne exclusively or predominantly by government or taxpayers, to being shared with parents and students. This cost sharing, as articulated by Johnstone (2003), may take the form of tuition fees to shift governments or taxpayers' financial burden to students and families. Such policy change may bring about enrolment shift, particularly in rapidly expanding educational systems, from a heavily subsidized public sector to a much less subsidized, tuition-dependent private sector.

The rationales for cost sharing are three, which differ considerably in their underlying economic, political and ideological assumptions (Johnstone 2003). The first rationale is the sheer revenue need other than governmental funding. Since higher education is recognized as a major engine of national economic growth and a provider of individual opportunity and prosperity, there has been a dramatic increase in both public and private demand in most countries. However, the institutions providing higher education are nearly everywhere in the world, especially in most developing or low-income countries and in those in transition from planned-economy to market-driven countries, suffering from a severe financial crisis. Thus, tuition and other fees from students and families have the potential for substantially augmenting the increasingly scarce public revenues. The second rationale for tuition and other forms of cost sharing is based on the notion of equity: those who benefit should at least share in the costs. For the reason that it has long been observed, the high public subsidy of low or no tuition actually

resembles a transfer payment from public treasury to middle and upper middle class families. So a portion of the tuition collected can fund the disadvantaged in the form of grants and loan subsidies, which can maintain and even enhance accessibility. A third rationale for cost sharing is the neoliberal economic notion which sees higher education as a valuable and highly demanded commodity, whereas priced tuition brings some of the virtues of the market like efficiency and responsiveness. They believe the payment of tuition will make students and families more discerning consumer and the universities more cost-conscious provider, while the need to supplement public revenue with tuition will make the universities more responsive to individual and societal needs.

For the reasons cited above, portion of costs shared by parents and students are probably inevitable and economically rational. The World Bank and most other development experts have recommended the supplementation of higher educational revenues by non-governmental sources – primarily by students and family – as one essential solution to increasingly underfunded and overcrowded universities in the developing world (Johnstone, 1993; World Bank, 1994; Ziderman & Albrecht, 1995). Consequently, national systems and individual institutions may face the challenge of maintaining higher educational accessibility, especially for poor, minority, rural, and other underserved populations in those countries with increasing income disparities.

The question that is most commonly raised about higher education's accessibility is "the degree to which the selection process to be politically and ideologically acceptable or unacceptable" (Johnstone 2003). In this sense, higher educational accessibility may be seen as a policy goal that participation should mainly be determined by interest, ability, and talent, rather than by family income or status, race or ethnicity, gender, region or rural/urban location.

However in active, though the true causation that hinders higher educational participation may be

subtle and complex, there exists a substantial underlying association between origin and education attainment in all countries.

The empirical research (Leslie & Brinkman 1989; Kane 1995; Heller 1999) on the effects of both tuition and need-based financial assistance on US student enrolment behavior is mainly econometric analysis. The result shows that while the combined effect of tuition discounted by financial aid, which refers to net price, has little effect on middle and upper-middle income students, it can have a measurably discouraging impact on low-income youth, an impact that is only partly offset by increasing need-based aid.

The worldwide trend toward some greater cost sharing of increasing tuition and diminishing levels of public subsidies seems inevitable. Johnstone (2003) made conclusions that: (1) higher education in the future will need vast additional resources, particularly in the developing countries; and (2) the only alternative to more of the burden being shifted to parents and students is for there to be very large increase in taxes, progressively raised. But with difficulty in collecting more heavily taxes from the rich and restraining public revenue, it is almost certain that enrolments will be restricted, and/or the quality of “mass” and “free” higher education will be lower without some additional cost sharing.

### **3.4 High Charge Policy under “Industrialization of Education”**

However, the seeming overcharge in educational system is the reason for so intensively criticizing recent years’ “industrialization of education”. It has caused serious educational inequality and corruption while acting to the detriment of the majority’s economic interest. The soaring educational expenses started to rise since the late 1990s, with China’s higher educational tuition fee reform. In the context of a market economy, the idea of cost sharing in non-compulsory education is widely shared by the mass, in that individuals should pay partial

expenses as their educational investments to services. But the upward tendency of tuition fees was losing grip to irrational level later on, which became controversial to the public.

### **3.4.1 Continuously Rising Education Charge**

With increasingly larger gaps between urban and rural, and wealthy and poor, population costs in education, health care and housing are together taking more and more share (about one third) of Chinese households' consumption expenditures, and they've been called the "new three giant hurdles". In the field of education, the most serious problems are the difficulty and high cost of receiving education. In 2004, educational expenses accounted for 7.8% in urban households' consumption expenditures of 514 yuan per capita, which is higher by 41% than in 2000 and increased 9% annually (Ru, 2006).

According to Horizon Research Group's "2005 Chinese Households' Living Quality Index Research Report" (Diao, Fu, 2006), the poor groups separately account for 21.4%, 14.9% and 19.4% in cities, towns and villages. The finding suggests that educational expenses have become the key of poverty. About 40% to 50% of people in poverty have mentioned that "supporting children to school" is their primary reason to be in poverty, especially in rural families. From October, 2004 to October, 2005, the educational expenses in rural families with school-age children is on average 2,724.2 yuan, which accounts for 32.6% of their total family income; while in cities and towns, expenses are 6,016 and 4,065.7 yuan, which account for 25.9% and 23.3%, respectively of their total income. Thus, being trapped in poverty by paying for education, plus moving back into poverty by medical crises have become common phenomena in rural areas.

The survey data from Shanghai Households' Educational Development Status (Gong, 2005) reveals that educational expenses account for nearly one fourth (23.6%) of total income in families with an under-18 age child. This proportion is much higher than the nearly 10% share in

developed countries. If we further consider higher education and study abroad, the number would definitely go up sharply.

Various resources and explanations of data have made correct evaluation on educational expenses a puzzle. Like findings of “Households’ Living Status Survey in 11 Western Provinces and Cities” (Yang, 2006) done by Ministry of Science and Technology suggest, if we include tuition, miscellaneous fees, books and supplies fees, uniform fee, food and accommodation fee, and transportation fee together as educational expenses, then the average expenditures for students in primary, junior and senior school are 421, 1,296 and 2,805 yuan individually, while the cost of higher education is 8,586 yuan. With an average household income of 11,633 yuan in western areas, certain people have calculated and made a conclusion that expenses for students in primary and junior school are not too expensive as their proportions in total family income are 4% and 11% (Liu, 2006). However, to be specific, for western rural families, their average annual income is 9,525 yuan. Thus expenses for them to receive primary, junior and senior education account for 4.4%, 13.6% and 29.4% of total income. Families of the bottom 20% income group in western areas only hold 3.5% in total urban and rural family income, whereas the highest 20% takes 50.5%, which is 14 times more than the lowest 20% group. Moreover, more than 40% western families have debt burden of an average 10,401 yuan (Wang & Zhao, 2005). Obviously, family income of the lowest 40% income group is far below the average level. Therefore, we cannot simply conclude that expenses for primary and secondary education are not costly for them. In fact, the reason for many rural families to be trapped in poverty by receiving education is largely because they have to support more than one child, especially into senior high school.

As the development of education is sustained to some degree by education fees, the rocketing family educational expenditure resulting from educational reform has increased more quickly than any other type of expenditure, which inhibits household's consumption and exerts disadvantaged effect on national economy.

### 3.4.2 High Charge in Higher Education

China's higher education system has experienced unprecedented development since the 1980s, especially after the 1999 expansion reform. During the past 20 years, this field has received the fastest growth rate and the most attention in society, with its scale multiplying several times in such short time period. The initial aim of "popularization of higher education in 2010" (undergraduates account for 15% in 18~21 age population) has been achieved ahead of time in 2002 (Xia, 2008).

Table 3.3 Higher Education Enrollments since the 1990s (Calculated by Ten Thousands People)

	1990	1995	1998	1999	2000	2001	2002	2003	2004
Undergraduate level	60.89	92.59	108.36	159.68	220.61	268.28	320.50	382.17	420
Annual growth rate (%)	2.01	2.9	8.3	47.4	31.45	21.61	19.46	19.24	9.9
Graduate level	3.0	5.11	7.25	9.2	12.85	16.52	20.26	26.89	32.63
Annual growth rate (%)	3.45	0.39	13.82	21.38	39.32	28.56	22.65	32.7	21.35
Enrollment rate (%)	3.5	7.2	9.8	10.5	11.5	13.3	15	17	19

Source: China Statistics Yearbook, 1991-2005.

The extensive higher educational expansion started in 1999. Although research on economics of education (Yang, 2006) indicates that educational investment will inhibit normal consumption in a short time and benefit economic development only in middle or long term, like what we've seen today, for reasons that development of higher education then is far below the actual social

demand and average level of developing countries, the expansionary strategy in higher education should be viewed as correct. It would contribute to greater supplies of professional talent and the delay of employment pressure. However, due to over-simple thought on pulling economic growth by expansion, China's higher educational system has immediately stepped into irrational conditions.

While higher educational expansion on the one hand has changed many people's fates, on the other hand it has drawn more and more criticisms. The most controversial issue is its high tuition policy. High educational institutions began their tuition fee reform in the early 1990s. Until 1997, with implementation of a one-track tuition fees charging system between government and self-supported students, the free higher education era that started in the 1950s has finally come to an end. The cost sharing theory which emphasizes that individual should undertake part of his/her higher educational costs is widely accepted. Seldom are people against charging, but questions lie in how much and in what way should they be charged.

The higher educational tuition standard has kept rising since the tuition fee reform in 1997. By now, only tuition and accommodation fee are ruled by government. The accommodation fee in force is about 800~1,200 yuan per student, while the tuition changed from no more than 100 yuan in 1990 to over 400 yuan in 1994, and to around 2,000 yuan in 1998. However, the average higher educational tuition in 1999 was 2,769 yuan, which increased by 40.3% over the previous year. Subsequently, the number rose by 15% or even 20% in some areas on the 1999 basis; thus the average tuition surpassed 4,000 yuan per year (Yang, 2006). Though staying stable in the next few years, tuition was adjusted again in 2004, which was enhanced by another 15% or even

20% on the 2003 basis and reached 5,000 yuan per student on average <sup>1</sup>(Xi'an Evening Paper, released on June 10, 2005). In some key universities and hotly-demanded majors, it can further be over 10,000 yuan. When consider accommodation fee and other living expenditures together, the four-year undergraduate period would cost around 60,000 yuan per student. Even in regular provincial universities, this number would still be about 40,000 yuan (Wu, 2004; Chen J., 2005). Therefore, tuition seems like an unbearable economic burden on the shoulders of low income urban household and poor peasant. The higher educational tuition in the past 10 years has multiplied by 20 times, whereas the growth of GDP per capita is no more than 4 times (Zhou X. Y., 2005).

In 1999, the Ministry of Education published “Decisions on Deepening Educational Reform and Implementing Education for All-round Development”. It set a price ceiling for higher educational tuition that universities cannot charge students more than 25% of their total per capita costs (Ministry of Education, 1999). At present, the costs in science and engineering disciplines are 14,000~16,000 yuan per capita and 12,000~14,000 in arts (Yang, 2006). If we consider 5,000 yuan per capita per year as tuition standard and further count by it, then students would have to share 33%~38% in total costs. In August 2005, Chinese vice Minister of Education also confessed to the overcharge tuition at that time compared to the initial 1999 level of 3,500 yuan (Guo, 2005). In developed countries, tuition in public universities always accounts

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<sup>1</sup> Tuition standards per year of some universities in 2004 are: Qsinghua Univ. 5000 yuan; Peking Univ. 4900~5300 yuan, Medicine Department 6000 yuan; Beijing Normal Univ., People's Univ. of China 4800 yuan; Beijing Institute of Tech., Beijing Univ. of Post & Telecommunication 5000~6000 yuan; Univ. of International Businesses & Economics, Beijing Language and Culture Univ. 6000 yuan; Shanghai Foreign Languages Univ. 10000; Fudan Univ. 5500 yuan; Harbin Institute of Tech. 4000~5500 yuan; Nankai Univ. 4200~5000; Zhongshan Univ. 4560~5160 yuan; Sichuan Univ. 4600~5000 yuan; Xi'an Jiaotong Univ. 3750~5200 yuan; Zhejiang Univ. 4800 yuan; Nanjing Univ. 4600; Shandong Univ. 3600~3940 yuan.

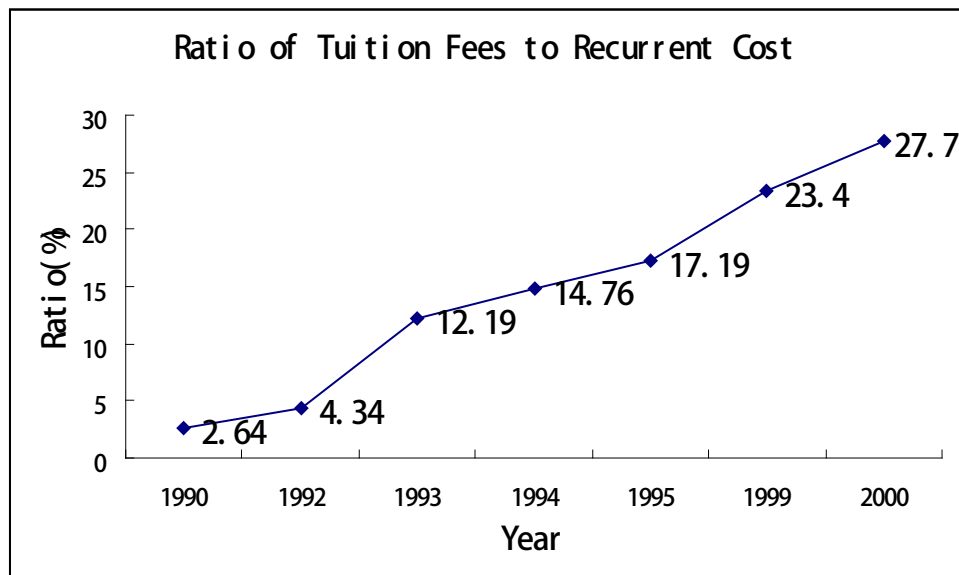


for 13%~15% of total costs. The average annual tuition in 1995 for an US public four-year college was 2,689 dollars, which took only 12% of average income per capita (Yang, 2006).

Table 3.4 The Proportion of Tuition Fees in Recurrent Cost per Students in the 1990s

	1990	1992	1993	1994	1995	1999	2000
Tuition fees	87.8	208	610	888	1124	2769	3550
Recurrent cost	3314	4790	5029	6022	6541	11854	12815
Ratio (%)	2.64	4.34	12.19	14.76	17.19	23.4	27.7

Figure 3.1 The Proportion of Tuition Fees in Recurrent Cost per Students in the 1990s



Source: Fan, Y. W. (2006). *Marketization of higher education and equal opportunity*. Shanghai: Shanghai Education Press, 9. (in Chinese)

Consensus hasn't been reached on how to properly calculate the costs. Nonetheless, to make comparisons from every other aspect, Chinese higher educational tuition is still far beyond rational. The higher educational system doubled in scale from 1998 to 2001, while government funding increased by 80% and institutions' self-financing funds rose by 1.7 times. Students'

tuition has become the most important way for colleges to make revenue in the current multi-fundraising system when income from it increased by over 2 times. During these four years, total revenues of Chinese higher educational institutions are 54.5 billion, 70.4 billion, 90.4 billion, 114.5 billion and 148.8 billion yuan separately (Chen, 2003). Tuition and miscellaneous fee is the principal source for institutions' operating revenues, which account for 26.3% in total revenue in 2002 compared with the almost constant 13% of other operating revenue (Table 3.5, Li, 2004). In 2004, tuition and miscellaneous fees in China's higher education represented 32% of total costs per student, it in comparison with only 19% in total revenue of US public universities (1996-1997). (Chen G.L., 2005)

Table 3.5 Financial Resources of Chinese Higher Educational Institutions from 1998 to 2002 (%)

	1998	1999	2000	2001	2002
Budgetary government funding	60.5	60.0	55.8	52.9	
Among: operating expense	49.6	49.4	47.9	46.7	48.7
Construction fund	11.9	10.6	7.9	6.2	
Education surtax	1.4	1.0	0.9	0.6	
Enterprise operating income	2.1	1.8	1.8	1.4	
Tuition and miscellaneous fee	13.4	17.2	21.3	24.7	26.3
Other undertaking revenue	13.2	12.7	13.4	13.3	
Donation	2.1	2.3	1.7	1.5	
Other	6.4	5.0	5.1	5.5	

Source: Li, W. L. (2004). Analysis on multi-resources of China's higher educational revenue. Paper of *International seminar on higher educational development and financial policy*, 2004. (in Chinese)

If we further consider the proportion to GDP per capita, then China's tuition standard may be the highest of the world. The tuition standard in 2000 was 4,200 yuan, which equaled 72% of urban household's average annual income per capita (5,854 yuan) and 190% for rural households (2,210 yuan) (China Statistics Yearbook, 2001). Including accommodation, books and supplies,

and other living expenses, the actual amount would exceed one urban or two rural people's annual income. According to survey data from the Jilin provincial government research centre, in 2004, average tuition per year in Jilin province was 6,000 yuan, accommodation fee 1,000 yuan and board expenses 4,800 yuan. Therefore, total expenses in one year would be 11,800 yuan per student. However, the net average annual income per rural resident was 3,000.42 yuan at that time, which meant it would need four rural residents' annual net income to support one undergraduate! (Hou & Peng, 2005)

*The Observer* in May, 2005 reports that, according to a published "Rank of International Higher Education" research, Japan has the most expensive tuition, with educational expenses per student of 8,930 pounds (tuition 5,000~6,000 dollars) and no tuition-waiver. This amount equals 110,000 yuan in China. However, if we calculate by relative purchasing power and consider Japan's per capita GDP of over 31,000 dollars which is 31 times more than China's around 1,000 dollars level, then the 110,000 yuan of Japanese tuition in fact equals 3,550 yuan in China. So to compare by payment capacity, China's undergraduate expenses are actually 3 times higher than the world's top! (Tong, 2005)

The direct influence of the high fee policy is the appearance of enormous numbers of impoverished students on campus, and it indirectly restricts higher educational demand by rural students. This situation has other consequences, such as suicide tragedies caused by incapacity to pay tuition fees every year. Currently, the needy students in China's regular higher educational institutions account for 20% of total undergraduates, and the proportion of especially needy students is 5%~10%. But in some western local universities, this proportion could be over 50%. For example, in 2004, of all the 6,841 undergraduates in Qinghai Normal University, the number of needy student is 4,167 (60%) and especially needy students 2,908. They have to pay at least

7,000 yuan per student per year for receiving higher education, which includes tuition 3,000 yuan, living expenses of at least 3,000 yuan, accommodation fee 800 yuan, plus book and supplies fees of 400 yuan. Here, even three labor forces together cannot afford one undergraduate! (Liu, 2005)

Chinese government has five different ways – scholarship, loan, work, waive, subsidy – to help needy students, but the main part of student loan hasn't been effectively carried out nationwide for many reasons. The student loan policy was initiated from 1999, and up to March, 2004 there were altogether 1.886 million applicants and 855,000 recipients. The total amount of loans applied for was 14.04 billion yuan while actual lending was 6.95 billion yuan. Both the number of receivers and loans provided in practice has not exceeded half of the applicants (Chen & Zhang, 2004). Luckily, the situation has improved a lot since the 2003 student loan reform. Until March, 2005, 87% of the total 1,509 higher educational institutions have signed contracts with banks. It was estimated that the number of student loan recipients in the year 2004 to 2005 would be 1.6 million and the amount would be 9 billion yuan. (Xie, Yuan, 2005)

It has long been confirmed that in terms of influences of social and cultural capital, advantaged groups are benefiting the most in the higher educational system internationally. Therefore, the former free or low charge policy in higher education in effect has unequally provided subsidies to many families with high resources. In recent years, even European countries that traditionally offered higher education for free have started their tuition reforms. Therefore in China, the debate is not on whether but on how much should be charged. If poor students are excluded from higher educational institutions only due to certain economic reasons, then another aspect of educational inequality will be raised.

## CHAPTER 4 HIGHER EDUCATIONAL URBAN-RURAL DIFFERENCES IN ACCESS

China's higher education has stepped into a new era since 1990s, especially after the expansion from 1999. The enrollment rate of higher education increases from 9.8% in 1998 to 19% in 2004 (China Statistics Yearbook, 1999, 2005). Within such context, people are becoming more concerned about issues of equality and the situation of rural students to receive higher education.

### **4.1 Changes after Expansion**

The urban-rural difference in higher educational access opportunity was not prominent before the 1980s. During the 1950s, 1960s and the period of Cultural Revolution, due to emphasis on family origin and adherence to political standards, children of workers and peasants have increased their representation steadily in higher education. Their percentage increased from 20.5 percent in 1952 to 55.28 in 1958 and 71.2 in 1965 (Yang, 2006).

Since the implementation of the Reform and Open Policy, the urban-rural difference is gradually manifested although with the uniform National College Entrance Exam. Some scholars studied the influence of father's occupation on their children's educational achievement at the beginning of 1980s. They concluded that children of cadres and intellectuals enjoyed more educational opportunities than children of workers and peasants (Yang, 2006). A sample survey was done in eight universities in Beijing as early as 1980. The result showed that of all 1980-enrolled freshman, children of peasants accounted for 20.2%, workers 25.0%, cadres 15.5%, and professionals 39.3%. Another survey conducted by Jianhua Hu in Nanjing University

and Nanjing Normal College in 1982 showed that children of peasants took 22.7% and those “physical labors” including workers hold 40% of university seats. By contrast, at that time, the percentages of agricultural labor and physical labor in total labor population were 80.3% and 90% respectively. Besides, according to the 1990 statistics of Beijing Enrollment Office, children of cadres, militaries and clerks were 13,474, which accounted for 78% of all 17,248 enrolled university students, while children of workers and peasants were only 3,561 and 21%. (Yang, 2006)

Urban-centered policy and a huge urban-rural gap have existed in China’s elementary and secondary education for a long time. Thus in the context of higher educational expansion, we must pay special attention to the change in educational opportunity between urban and rural areas.

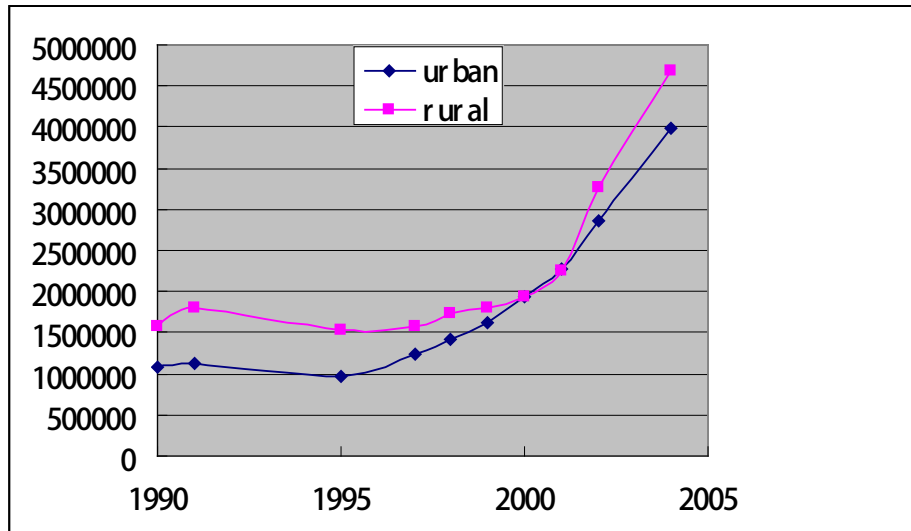
#### **4.1.1 Urban-Rural Sign Up Number for NCEE per Ten Thousands People**

The most direct way to measure higher educational urban-rural difference is to compare annual numbers of people enrolled in higher education with demographic structure. However, we cannot get exact enrollment numbers by provinces or by institutions so far. Thus in this study, the sign up number for NCEE has replaced enrollment number as the measurement. Although the two have clear distinctions, it can more or less be applied to show the basic tendency in changes of higher educational access opportunity.

Figure 4.1 shows the rising trend of sign up number for NCEE since 1990. In terms of a huge population base, the sign up number in rural areas has long been higher than in urban areas. However, this trend varied after the expansion. From 1997 to 2001, growth rates of urban sign up numbers increased much faster than rural by 4 times in 1999 and 3 times in 2000 (Table 4.2). As a result, numbers of urban students were getting closer to rural ones and had exceeded it for the first time in 2001. In that year, urban NCEE sign up number was 2,275,000 and rural 2,258,000,

which were 2.12 times and 1.43 times more than the year of 1990 respectively (Table 4.1). It shows that, increments of higher education have benefited urban students more. (Yang, 2006)

Figure 4.1 The Urban-Rural Sign Up Number for NCEE (Calculated by Ten Thousands People)



Source: Yang, D. P. (2006). *Ideal and reality of Chinese educational equality*. Beijing: Peking University Press. (in Chinese)

Table 4.1 The Urban-Rural Sign Up Number for NCEE (Calculated by Ten Thousands People)

	1990	1991	1995	1997	1998	1999	2000	2001	2002	2004
Urban	107.34	113.58	97.83	123.64	142.22	161.04	193.83	227.56	286.83	397.68
Rural	157.59	179.47	152.16	157.05	173.79	179.40	194.65	225.89	325.63	469.46

Source: Yang, D. P. (2006). *Ideal and reality of Chinese educational equality*. Beijing: Peking University Press. (in Chinese)

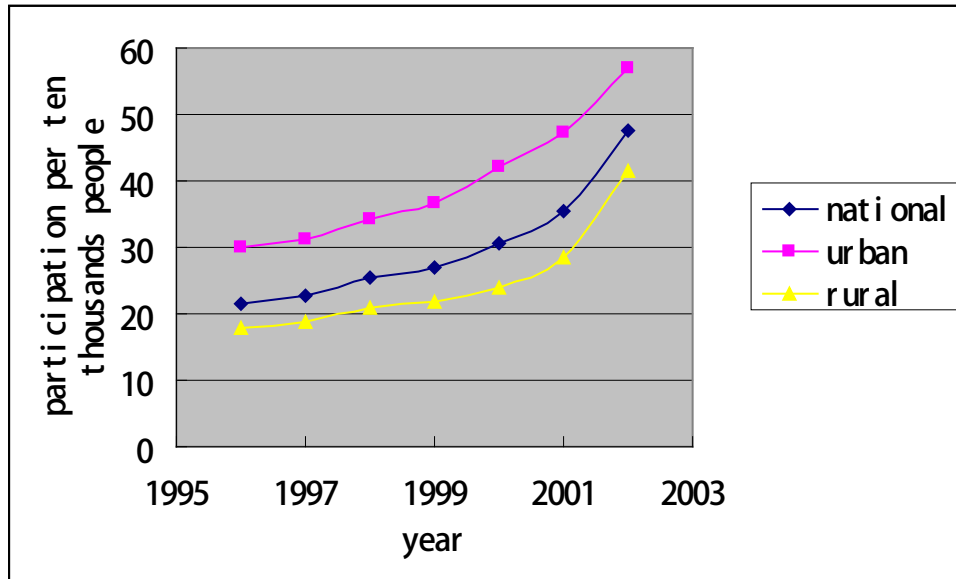
Table 4.2 shows that, before 2001, the growth rates of urban sign up number for NCEE were always much faster than rural, whereas the situation inversed from 2002. Compared to 1998 before the expansion, the 2004 sign up number in urban areas increased 1.29 times, which equalized rural with the same growth rate. However, if we compared with 1990, then urban growth rate would be more than 2 times and rural 1.5 times. That is to say, urban people were still more advantaged than rural ones.

Table 4.2 Growth Rate of NCEE Sign Up Number (%) between Urban and Rural

	1998	1999	2000	2001	2002	2004	2004:1998
Urban	15.0	13.2	20.4	17.4	26.0	13.3	1.29 times
Rural	10.6	3.2	8.5	16.1	44.1	22.2	1.29 times

Source: Yang, D. P. (2006). *Ideal and reality of Chinese educational equality*. Beijing: Peking University Press. (in Chinese)

Figure 4.2 NCEE Sign Up Number per Ten Thousand People from 1996 to 2002



Source: China Education Statistics Yearbook, 1996-2002.

Table 4.3 NCEE Sign Up Number per Ten Thousand People from 1996 to 2002

	1996	1997	1998	1999	2000	2001	2002
National	21.59	22.70	25.33	27.07	30.65	35.53	47.68
Urban	29.96	31.34	34.18	36.81	42.22	47.35	57.12
Rural	17.92	18.66	20.90	21.87	24.08	28.39	41.62
Difference	12.04	12.68	13.28	14.94	18.14	18.96	15.50

Source: China Education Statistics Yearbook, 1996-2002.

Except for absolute number, the index of “sign up number per ten thousands people” could explain urban-rural difference more effectively. As in Figure 4.2 and Table 4.3, the urban sign up number per ten thousand people is evidently higher than that for rural. In 1998, the difference was 13.28. Then it climbed to the peak of 18.96 in 2001 and fell back to 15.5 in 2002 (China Education Statistics Yearbook, 1996-2002). Since urban areas enjoy higher enrollment rates than



rural areas, the real access opportunity of urban people is definitely more than the number conveys. Although the gap is narrowing, it still exists and hasn't been restored to the levels of the mid-1990s.

Wei (2003) has provided 1990s urban-rural enrollment numbers per ten thousand people in his master's thesis, as shown in Table 4.4. The reflected variation tendencies of sign up number per ten thousand people and enrollment number per ten thousand people are similar in the years of 1996, 1997 and 1998. And if we analyze by enrollment number per ten thousands people, urban youth had 3 times more access than rural through NCEE in 1998.

Table 4.4 Enrollment Numbers per Ten Thousands People in the 1990s

	1990	1991	1996	1997	1998
Urban	13.75	12.80	17.85	17.78	19.63
Rural	3.23	3.51	5.60	5.80	6.07
Difference	10.52	9.29	12.25	11.98	13.56

Source: Wei, H. (2003). *A positive study on China's urban-rural higher educational equal opportunity*. Master thesis of Beijing Normal University. (in Chinese)

#### 4.1.2 Urban-Rural Sign Up Number for NCEE of Preceding-year-students

The NCEE candidates can be divided into current-year-students and preceding-year-students. When we compare changes in urban-rural sign up numbers for NCEE, we could find that although urban growth rate is faster than rural, the rural sign up number is still higher than urban. However, as shown in Figure 4.2 and Table 4.5, the urban current-year-students' sign up number exceeded rural from 1999 to 2001. It means that after the drastic 1999 expansion, the incremental NCEE candidates in rural areas were mainly preceding-year-students. (Yang, 2006)

From the above analysis on NCEE candidates, the preceding-year-students in rural areas are more than urban by a gap of 5 to 10 percent. But this difference becomes smaller in recent years, as shown in Table 4.6 (Yang, 2006). The reason for more preceding-year students in rural areas

on the one hand reflects the difference between urban and rural elementary education, which leads to lower higher educational enrollment rate by rural students; on the other hand, many rural students are forced to re-prepare NCEE just because they cannot afford comparatively high tuition fees in those 3<sup>rd</sup> tier colleges (vocational or private colleges). This not only shows the lower higher educational enrollment rate of rural students but suggests that, seldom has there been any other way for them to change fate. Therefore, the large proportion of rural preceding-year students in NCEE candidates can be a signal in seeing urban-rural difference in educational opportunity.

Table 4.5 Urban-Rural Sign Up Numbers for NCEE between Current and Preceding-year Students

	1990	1995	1997	1998	1999	2000	2001	2002
Urban current	73.31	76.26	94.46	107.49	118.74	154.0	185.07	231.36
Rural current	97.84	96.96	98.52	113.58	114.95	135.25	166.97	244.91
Urban preceding	34.03	21.56	29.18	34.71	42.30	39.84	42.49	55.47
Rural preceding	59.75	55.21	58.53	60.21	64.44	59.40	58.92	80.72

Source: Yang, D. P. (2006). *Ideal and reality of Chinese educational equality*. Beijing: Peking University Press. (in Chinese)

Table 4.6 Proportions of Preceding-year-student in Total NCEE Candidates from 1998 to 2002 (%)

	1990	1995	1998	1999	2000	2001	2002
Urban	31.7	22.0	24.4	26.3	20.5	18.7	19.4
Rural	37.9	36.3	34.6	35.9	30.5	26.1	24.8

Source: Yang, D. P. (2006). *Ideal and reality of Chinese educational equality*. Beijing: Peking University Press. (in Chinese)

#### 4.1.3 Urban-Rural Ratio of Sign Up Number for NCEE per Ten Thousands People

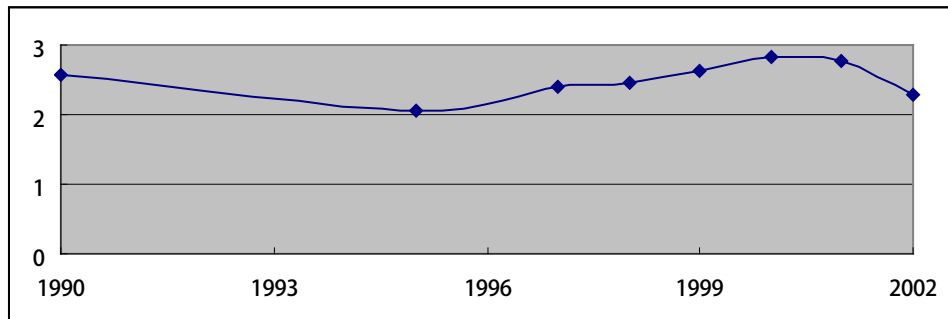
The urban-rural sign up number will be affected by the population structure, therefore, to apply “urban-rural ration of sign up number for NCEE per ten thousands people” would be more scientific in measuring urban-rural differences in higher educational access opportunity.

The formula is:

Urban-rural ratio = (urban sign up number/ urban population)/ (rural sign up number/ rural population)

A bigger ratio means a greater urban-rural difference. If the ratio equals to 1, then difference doesn't exist. Strictly speaking, we should use school-aged population as our denominator for both areas' NCEE candidates. Since appropriate data are unavailable, we instead employ non-agricultural/ agricultural population here to calculate.

Figure 4.3 Urban-Rural Ratios of Sign Up Number for NCEE per Ten Thousands People from 1990 to 2002



Source: Yang, D. P. (2006). *Ideal and reality of Chinese educational equality*. Beijing: Peking University Press. (in Chinese)

Table 4.7 Urban-Rural Ratios of Sign Up Number for NCEE per Ten Thousands People from 1990 to 2002

	1990	1995	1997	1998	1999	2000	2001	2002
Ratio	2.58	2.05	2.39	2.45	2.62	2.82	2.77	2.28

Source: Yang, D. P. (2006). *Ideal and reality of Chinese educational equality*. Beijing: Peking University Press. (in Chinese)

Figure 4.3 shows changes in the urban-rural ratio from 1990 to 2002 (Yang, 2006). There appears two peaks of 1990 and 2000, and two turning points of 1995 and 2001, which clearly tell the changing situations: first, the consistent ratio 2 means still large urban-rural differences in higher educational access opportunity; second, three phases could be divided from it – (1) 1990

to 1995. The difference is diminishing, with a trough in 1995 of 2.05. (2) 1995 to 2001.

Accompanied with higher educational expansion, the ratio keeps soaring, which means a bigger difference. (3) After 2001. The ratio goes down, which suggests improvement of general conditions.

There is no straightforward macro-policy that can be used to explain such improvement. The cause of the turning point could be attributed to historic change in China's total urban-rural population structure. Starting from 1990, the non-agricultural population increased by 10 million annually. Though the proportion of agricultural population had decreased year by year, its absolute number still rose. However, since 2001, the agricultural population had not only decreased in proportion but also in absolute number, with exact amount of 1 million (Table 4.8, China Statistics Yearbook, 1990-2002). While numbers of urban and rural NCEE candidates were almost the same in 2001 (urban 2,275,600 and rural 2,258,900), the reduced total agricultural population led to one turning point of the ratio. In the following year 2002, with continuing ten-million decreases in agricultural population and excess absolute sign up number for NCEE in rural areas, the downward tendency of the ratio was more obvious. And this trend would maintain once agricultural population kept going down.

Table 4.8 Change in Urban-Rural Population from 1990 to 2002 (million)

Year	Total	Urban	Percent	Rural	Percent
1990	1129.54	235.67	20.86	893.87	79.14
1995	1184.68	282.43	23.84	902.25	76.16
1998	1214.98	304.65	25.07	910.33	74.93
1999	1224.92	312.42	25.51	912.49	74.49
2000	1236.72	322.49	26.08	914.23	73.92
2001	1245.41	332.02	26.66	913.39	73.34
2002	1252.36	349.34	27.89	903.01	72.11

Source: China Statistics Yearbook, 1990-2002.

## 4.2 Urban and Rural Differences by Provinces

In the context of changes in the general condition of urban-rural higher educational difference, we should specifically pay attention to situations that range from one province to another. This is partly because China's regional differences are closely related to urban-rural difference, and also because the research on provincial difference could contribute to more fully understanding factors that affect the difference.

I still use "urban-rural ratio of sign up number for NCEE per ten thousand people" as the measurement here. The sign up numbers for NCEE per ten thousand people by provinces from 1990 to 2002 are listed below in Table 4.9 (China Higher Education Admission Yearbook, 1990; China Education Exam Yearbook, 1995; China Education Statistics Yearbook, 1997-2000.).

Although national average ratios vary from 2 to 3, provincial differences could be large. Some of the highest values are 25.94 (Tibet, 2001), 13.56 (Guizhou, 2001), 11.05 (Hainan, 2002), 10.54 (Yunnan, 2000) and 6.38 (Chongqing, 2000). Generally, most provincial data turn in 2000 and 2001 to verify the downward trend of national statistics. But the ratios in the three northeastern provinces, plus Jiangxi, Hainan and Xinjiang are still rising.

We can further categorize these provinces into three large regions according to the ratios and get Table 4.10. Region I stands for small difference (ratio less than 2), while Region II stands for medium difference (ratio varies from 2 to 3) and Region III stands for big difference (ratio more than 3).

Based on findings of China's regional development research on educational modernization, the 31 provinces and cities could also be divided into four regions in terms of their average schooling years per capita and human development index in 2000 (Yang, 2006). (1) 3 developed-education cities: Beijing, Shanghai and Tianjin; (2) 9 developed-education provinces: Liaoning, Jiangsu, Guangdong, Zhejiang, Fujian, Jilin, Heilong Jiang, Xinjiang, Shanxi; (3) 11

developing-education provinces: Shandong, Hunan, Inner Mongolia, Hubei, Hainan, Jiangxi, Hebei, Chongqing, Ningxia, Henan, Shaanxi; and (4) 8 less-developed provinces: Anhui, Sichuan, Guangxi, Gansu, Guizhou, Qinghai, Yunnan, Tibet.

Table 4.9 The Sign Up Numbers for NCEE per Ten Thousands People by Provinces from 1990 to 2002

	1990	1995	1997	1998	1999	2000	2001	2002
National	2.58	2.05	2.39	2.45	2.62	2.82	2.77	2.28
Beijing	1.89	1.53	2.61	2.44	2.72	3.02	2.80	1.96
Tianjin	0.92	0.95	1.42	1.42	1.49	2.51	2.69	2.30
Hebei	2.43	1.84	2.29	2.20	2.36	2.41	2.25	1.83
Shanxi	1.77	1.48	1.95	2.14	2.34	2.35	2.49	2.29
Inner Mongolia	1.33	1.08	1.16	1.13	1.25	1.18	1.23	1.25
Liaoning	1.40	1.01	1.39	1.37	1.49	1.79	2.05	2.17
Jilin	1.83	2.36	2.30	2.37	2.58	2.74	2.94	3.04
Heilong Jiang	1.68	1.43	1.97	1.95	1.94	2.08	2.28	2.29
Shanghai		1.31	1.77	1.31	1.58	3.02	2.45	2.37
Jiangsu	1.66	1.50	1.57	1.63	1.67	1.67	1.72	1.46
Zhejiang	2.63	1.91	2.03	1.96	2.12	2.23	2.21	1.91
Anhui	4.17	3.55	4.11	4.08	3.92	4.29	4.54	4.45
Fujian		1.83	2.04	1.93	2.09	2.44	2.32	1.01
Jiangxi	5.01	4.46	4.64	3.97	4.26	4.26	4.46	4.56
Shandong	1.89	1.22	1.24	1.31	1.73	1.71	1.70	1.47
Henan	2.36	2.06	2.43	2.48	2.74	2.49	2.40	2.17
Hubei	1.85	1.78	2.94	2.99	2.83	2.91	2.86	2.30
Hunan	1.87	1.63	2.22	2.37	2.64	3.10	2.95	2.10
Guangdong	3.41	2.53	3.19	3.27	2.97	2.88	2.74	2.02
Guangxi	9.59	3.00	4.21	4.40	4.70	4.91	4.64	3.68
Hainan	5.16	2.95	3.36	3.76	3.78	4.16	4.41	11.05
Chongqing				4.33	5.39	6.38	5.67	3.54
Sichuan	2.96	2.78	3.56	3.68	4.35	4.41	4.00	2.77
Guizhou	11.79	5.52	5.61	5.64	6.32	6.18	13.56	4.88
Yunnan	5.37	3.15	3.25	2.98	2.91	10.54	3.87	3.76
Tibet	60.45	17.67	27.62		15.20	12.31	25.94	20.00
Shaanxi	3.89	3.00	2.90	3.17	3.38	3.27	3.38	2.65
Gansu	3.69	1.89	2.70	2.78	2.85	2.89	2.71	2.28
Qinghai	4.95	2.71	2.84	2.86	3.10	3.25	3.53	3.34
Ningxia	2.38	1.86	2.59	2.75	2.88	2.99	2.85	2.16
Xinjiang		3.30	2.02	2.02	2.10	2.35	2.44	2.76

Source: China Higher Education Admission Yearbook, 1990; China Education Exam Yearbook, 1995; China Education Statistics Yearbook, 1997-2000.

Table 4.10 Regional Difference in Urban-Rural Ratio of Sign Up Number for NCEE per Ten Thousands People in 1998, 2000, 2002

1998(Mean 2.45)			2000 (Mean 2.82)		
<2	2~3	>3	<2	2~3	>3
Inner Mongolia	Xinjiang	Shaanxi	Inner Mongolia	Heilong Jiang	Beijing
Shanghai	Shanxi	Guangdong	Jiangsu	Zhejiang	Shanghai
Shandong	Hebei	Sichuan	Shandong	Xinjiang	Hunan
Liaoning	Beijing	Hainan	Liaoning	Shanxi	Qinghai
Tianjin	Henan	Jiangxi		Hebei	Shaanxi
Jiangsu	Ningxia	Anhui		Fujian	Hainan
Heilong Jiang	Gansu	Chongqing		Henan	Jiangxi
Fujian	Qinghai	Guangxi		Tianjin	Anhui
Zhejiang	Yunnan	Guizhou		Jilin	Sichuan
	Hunan			Guangdong	Guangxi
	Hubei			Gansu	Guizhou
	Jilin			Hubei	Chongqing
				Ningxia	Yunnan
					Tibet
2002 (Mean 2.28)					
<2		2~3		>3	
Fujian		Guangdong		Jilin	
Inner Mongolia		Hunan		Qinghai	
Jiangsu		Henan		Chongqing	
Shandong		Liaoning		Yunnan	
Hebei		Ningxia		Guangxi	
Zhejiang		Gansu		Anhui	
Beijing		Heilong Jiang		Jiangxi	
		Shanxi		Guizhou	
		Tianjin		Hainan	
		Hubei		Tibet	
		Shanghai			
		Shaanxi			
		Xinjiang			
		Sichuan			

If we construct crosstabs between educational modernization level and urban-rural higher educational access difference, then their relationships can be seen directly. Just as positive correlations showed in Crosstab Table 4.11 for most provinces in 2000, generally speaking, in

areas of advanced economy and education, issues of educational equality are always better than poor western areas. Unfortunately, a more complicated fact about imbalanced regional development has also been presented. Ranks of several developed cities fall behind some developing provinces, whereas levels of urban-rural ratio in some less-developed provinces like Inner Mongolia, Shandong and Gansu are better than their economic and educational development level.

Table 4.11 Provincial Educational Development Levels and Urban-Rural Differences in Higher Educational Access Opportunity, 2000

Equality Development Level	Region I Ratio<2	Region II 2<Ratio<3	Region III Ratio>3
Developed-edu cities		Tianjin	Beijing, Shanghai
Developed-edu provinces	Jiangsu, Liaoning	Heilong Jiang, Zhejiang, Xinjiang, Shanxi, Fujian, Jilin, Guangdong	
Developing-edu provinces	Inner Mongolia, Shandong	Hebei, Henan, Hubei, Ningxia	Hunan, Shaanxi, Hainan, Jiangxi, Chongqing
Less-developed-edu provinces		Gansu	Qinghai, Anhui, Sichuan, Guangxi, Guizhou, Yunnan, Tibet

Table 4.12 Provincial Educational Development Levels and Urban-Rural Differences in Higher Educational Access Opportunity, 2002

Equality Development Level	Region I Ratio<2	Region II 2<Ratio<3	Region III Ratio>3
Developed cities	Beijing	Tianjin, Shanghai	
Developed provinces	Fujian, Jiangsu, Zhejiang	Guangdong, Liaoning, Heilong Jiang, Shanxi, Xinjiang	Jilin
Developing provinces	Inner Mongolia, Shandong, Hebei	Hunan, Henan, Hubei, Ningxia, Shaanxi	Hainan, Jiangxi, Chongqing
Less-developed provinces		Gansu, Sichuan	Qinghai, Yunnan, Guangxi, Anhui, Guizhou, Tibet



Crosstab Table 4.12 exhibits the relationship of 2002 data. The provincial urban-rural differences in higher educational access opportunity have been reduced then, with Region I increasing from 4 in 2000 to 7 and Region III reduced from 14 in 2000 to 10. Additionally, situations in Beijing, Tianjin and Shanghai are improved to some extent. It tells us that urban-rural difference could at one time positively relate to levels of economic and educational development and at another time out of phase with them. Therefore, an area, no matter whether developed or less-developed, can do something to contribute to educational equality.

### **4.3 Urban and Rural Student Distributions**

The analysis on urban-rural ratio of sign up number for NCEE has showed that in terms of changes in population structure, urban-rural difference in higher educational access opportunity are decreasing in recent years. However, the ratio remains higher than expected and hasn't gone back to the level (2.05) in 1995. Meanwhile, the difference may become covert, qualitative and complicated from initial explicit, quantitative and macro-level status.

There are two themes in research on urban-rural difference in higher educational access opportunity. First is whether the distributions of higher educational access are equal between urban and rural areas, or whether the chances of children of peasant receiving higher education increase or decrease. Second is whether the distributions of various higher educational resources are equal between urban and rural students, or how the distributions of children of peasants in higher educational system. "Whether can enroll" is distinct from "which to enroll", and clearly, the later question is more invisible and profound.

China's higher educational system includes various types like regular, vocational, private, adult and self-study exam. The regular institutions are further differentiated as key university and provincial university. In the higher educational enrollment process, key university takes first-tier priority over second-tier provincial university, then follows with third tier of vocational and

private college. Since education has a close relationship with social stratification, the enrolled school type will definitely exert vital influence on student’s future success. In lack of detail data about undergraduates’ urban-rural character in existing national or local educational statistics, we can only look into the issue through some former surveys and case studies.

### 4.3.1 Recent National Surveys

#### 4.3.1.1 Survey in 1998 by Xie

Xie surveyed in total 69,248 undergraduates – freshman (1997-enrolled) and senior (1994-enrolled) – from 37 universities in 1998 (Zeng, 2000). The results are presented in Table 4.13 and 4.14. The percent of students from large/ medium-size city is 33.5%, which is relatively a larger portion compared to national population structure. Rural students take 35.6% or 47.3% if we further consider “town” as rural areas besides village. Between 1994 and 1997, the proportion of rural students in the surveyed universities was reduced by 1.3%.

Table 4.13 Changes in Students’ Origin Region (%)

	Large/medium size city	Country-level city	Town	Village
Freshman(1997-enrolled)	33.2	19.6	12.1	35.1
Senior(1994-enrolled)	34.2	18.3	11.1	36.4

Source: Zeng, M. C. (Ed.). (2000). *Economic Analysis on Educational Policy*. Beijing: People’s Education Publishing House, 259. (in Chinese)

Not only decreasing in proportion, rural students are also disadvantaged in their distributions in higher educational system. The divisions of higher educational institutions are: the first tier consists of national key universities that belong to Ministry of Education; second tier includes provincial key universities which are administrated by both Ministry and local governments; non-key universities that can trans-provincial enrollment are categorized as third tier and the last

fourth-tier colleges are limited to enroll only within province. Among all, student origins between first-tier and fourth-tier institutions vary the most.

Judged by tier rank, the actual student origin's proportion in first-tier national key universities is distinct from what the whole sample shows, that urban students represent 8.7% more than the average and rural less by 8.8%. Moreover, such unbalancing distribution is worsening. The proportions of students from urban and rural are respectively 40.2% to 28.7% of 1994-enrolled and 43.9% to 25.2% of 1997-enrolled. Apparently, rural students are reduced by 3.5% and urban increased 3.2%. Such change is significant (Zeng, 2000).

Table 4.14 Distributions of Student Origin Region in Various University Types

	Large/medium-size city	Country-level city	Town	Village
Total	33.5	19.1	11.7	35.6
National key university	42.3	19.9	11.0	26.8
Provincial key university	31.0	21.1	11.7	36.2
Regular university	42.0	18.1	11.5	28.4
Local college	22.0	16.5	12.8	48.7

Source: Zeng, M. C. (Ed.). (2000). *Economic Analysis on Educational Policy*. Beijing: People's Education Publishing House, 264. (in Chinese)

If we compare fourth-tier with first-tier institutions, then proportions of village origin and town origin are both higher by 21.9% and 1.8%, whereas country-level city origin and city origin are both less by 3.4% and 20.3 (Zeng, 2000). Here the difference is even more significant, which illustrates the basic trend that rural students are more likely to be enrolled in lower tier local colleges.

#### 4.3.1.2 Survey in 1998 by Zhong and Lu

Zhong and Lu (1999) surveyed in total 13,511 students from 14 universities in 1998 (Table 4.15). These universities are located in large cities such as Beijing, Nanjing, and Xi'an. In the sample, urban origin accounts for 31.2%, country-level city 20.9%, town 13.0% and village 34.9%. Besides, male students take up 62.3% and female 37.7%.

Table 4.15 Proportions of Urban-Rural Students in Various University Types

	Large/medium-size city	Country-level city	Town	Village
Total	31.2	20.9	13.0	34.9
Comprehensive university	37.6	20.6	11.2	30.5
Engineering-oriented university	31.1	22.7	14.8	31.3
Normal university	30.8	21.6	13.9	33.7
Agroforestrial geology-oriented university	14.1	14.7	9.8	61.4

Source: Zhong, Y. P. & Lu, G. S. (1999). Factors affecting student's choice on higher educational institutions under tuition fees. *Higher Education Research*, 1999(2), 31-42. (in Chinese)

This result of urban and rural proportions is similar to Xie's study. Additionally, various higher educational institutions can be categorized by their major orientations. There are four types in all: comprehensive, engineering, normal and agroforestrial geology. The former ones in this sequence mean advantaged, high-tuition and in hot demand whereas the latter mean disadvantaged, low-tuition and in less demand. We can see descending proportions of urban students in the system while an ascending order of rural ones from the table. In those agroforestrial geology-oriented universities which feature lower even free tuition, the proportion of rural students reaches an astonishing 61%! (Zhong & Lu, 1999)

#### 4.3.1.3 Survey in 2001 by Shanghai University of Finance

The Public Policy Research Centre in Shanghai University of Finance in 2001 conducted a sample survey to more than ten thousands undergraduates in 31 provinces and cities, with valid questionnaires 8,270 (including 3,060 in Shanghai). The sample composition is: junior college student 16.5%, undergraduate student 78.5% and graduate student 5%. Table 4.16 shows the result after subtracting Shanghai samples. To be specific, students with large/ medium-size city origin account for 47.5% whereas rural origins are only 16.3%, which differ considerably from conclusions of above two studies. Another phenomenon is presented here – proportions of urban student increase by 12% from junior college to undergraduate level and meanwhile rural reduce by 8%. However, in the level from undergraduate to graduate, urban origin decreases by 4.7% and rural increases by 2.7%. (Zhao, 2003)

Table 4.16 Distributions of Urban-Rural Students in Various Degree Levels (%)

	Large-size city	Medium-size city	Country-level city	Town	Village
Total	17.5	32.0	26.7	7.5	16.3
Junior college	13.8	29.1	21.5	13.2	22.4
Undergraduate	18.0	36.9	23.2	7.6	14.3
Graduate	26.3	23.9	23.6	9.2	17.0

Source: Zhao, H. L. (2003). *Public higher educational policy*. Shanghai: Shanghai University of Finance Press, 182. (in Chinese)

#### 4.3.1.4 Survey in 2004 by Xiamen University

A seminar was held in the college of Education, Xiamen University in 2004 to conduct research in provinces like Shaanxi, Fujian, Zhejiang, Hunan, Guangdong, Guangxi, Anhui and Shanghai. The total sample of 7,264 comes from 34 universities, which include 8 key universities that affiliated to Ministry of Education, 8 public provincial universities, 11 public

vocational colleges, 3 private vocational college, and 4 independent institutions. Table 4.17 shows proportions of rural origin students from various types of school. (Wang, 2005)

Table 4.17 Proportions of Rural Students in Various School Types (%)

Total	Key university	Provincial university	Public vocational college	Private vocational college	Independent institution
25.5	27.3	29.5	30.6	12.6	6.3

Source: Wang, W. Y. (2005). A study of the difference in higher education access opportunity for children in different strata in China. *Private Education Research*, 2005(4). (in Chinese)

The rural proportion in key universities is similar to Xie’s 1998 survey (Zeng, 2000), but is lower significantly in regular provincial universities. It’s also the first time that data includes students’ family background information in vocational, private and independent higher educational institutions.

To sum up, since the above studies were conducted in different years and of different scales, and various in their sampling methods, classification criteria and statistical processes, we cannot make effective comparisons and describe the exact status quo. However, we still could acknowledge some distribution characters of higher educational system from them – the higher the university’s tier, the higher the proportion of urban students. The proportion of rural students is highest in local colleges and this trend continues. In other words, urban students have a higher chance to be enrolled in selective key universities whereas rural ones are advantaged in less-demand low level institutions. Xiamen University has further concluded that the smallest access opportunity difference among all strata appears in public vocational colleges.

#### 4.3.2 Case Studies

It’s better to have some detail information about several key universities in order to support the analysis. As in Table 4.18, proportions of rural student in Tsinghua University, Peking

University and Beijing Normal University are all decreasing since 1990 (Zhang & Liu, 2005; Wei, 2003). The proportion has lowered by nearly 3 percent in Tsinghua University and Peking University and 8 percent in Beijing Normal University since 1998, which almost coincides with our previous knowledge.

In 2002, the percent of rural students in Beijing University of Post & Telecommunication is 26.0% (Yang, 2006).

Table 4.18 Proportions of Rural Students in Tsinghua University, Peking University and Beijing Normal University in the 1990s

Year	Tsinghua University		Peking University		Beijing Normal University	
	Enrollments (person)	Rural origin (%)	Enrollments (person)	Rural origin (%)	Enrollments (person)	Rural origin (%)
1990	1994	21.7			1260	28.0
1991	2031	19.0		18.8	1358	40.0
1992	2080	18.3	1810	22.3	1358	33.0
1993	2210	15.9	910	18.5	1403	36.0
1994	2203	18.5		20.1	1330	35.0
1995	2241	20.1	2089	20.9	1470	
1996	2298	18.8	2164	19.6	1495	29.0
1997	2320	19.5	2211	19.0	1505	
1998	2462	20.7	2240	18.5	1472	30.9
1999	2663	19.0	2425	16.3	1686	28.7
2000	2929	17.6			2001	
2002					2105	22.3

Source: Zhang, Y. L. & Liu, B. J. (2005). Chinese social strata and higher educational opportunity. Retrieved from <http://www.sociology.cass.cn/shxw/shjgyfc/P020050617316863433715.pdf>. (in Chinese); Wei, H. (2003). *A positive study on China's urban-rural higher educational equal opportunity*. Master thesis of Beijing Normal University (Beijing Normal University data). (in Chinese)

Since the expansion, the increment of rural undergraduates is mainly distributed in non-key provincial universities (Wei, 2003). For example, the percentage of rural freshman has increased

6 points from 54.7 in 1998 to 60.8 in 2001 in Hebei University of Science & Technology (Table 4.19).

Table 4.19 Proportion of Rural Freshman from 1998 to 2001 in Hebei University of Science & Technology

Year	Enrollments (person)	Rural origin (%)
1998	2482	54.7
1999	2693	54.6
2000	4360	54.3
2001	5205	60.8

Source: Wei, H. (2003). *A positive study on China's urban-rural higher educational equal opportunity*. Master thesis of Beijing Normal University. (in Chinese)

According to survey results (Wu, 2004) in three non-key universities of Tangshan College, North China Coal Medical University and Hebei Polytechnic University (Proportional Sampling, sample size= 2,897), the village origin shares 59.5% in average as Table 4.20 shows. This proportion continues to rise from 2001 and has reached 63.6% in 2003, of which 29% students come from state or provincial level poor country.

Table 4.20 Student Origins in Three Local Universities, Tangshan (%)

	Village	Town	City
2000-enrolled	59.6	19.8	20.6
2001	55.7	21.7	22.7
2002	58.8	22.5	18.7
2003	63.6	18.0	18.4
Average	59.5	20.4	20.0

Source: Wu, X. B. (2004). *Research on poor students under higher educational tuition fees charging system*. Master thesis of Beijing Institute of Technology. (in Chinese)

#### 4.4 Conclusion

With reference to the newest data provided by Tang, “Before expansion, the rural youths in higher education were 400,000, which took up 37% of all enrollments in 1998; and the numbers have become 2,300,000 and 51% in 2004 due to expansion. Within such short six-year period,



not only rural youths were enrolled 4 times more than ever but have exceeded urban youths for the first time in number.” (Tang, 2006)

Both the urban-rural ratio of sign up number for NCEE per ten thousands people and other former surveys have revealed that, the urban-rural difference in higher educational access opportunity initially increased since the 1999 expansion; however, the situation reversed around the year 2001. But such historic shift has not brought the real equality since the initial superficial difference in quantity has transferred to deeper and implicit qualitative difference. It is reflected in the distributions of students with urban or rural origin into various types of school and major.

The general stratification process in China’s higher educational system is: children of advantaged classes who own stronger cultural, economic and social capital are taking larger share in national key universities whereas situations of rural and disadvantaged classes are the opposite. The local higher educational institutions which possess less educational resources and are of inferior quality have enrolled more rural students including the poor ones. In addition, high tuition fees in vocational and private colleges have resulted in students there are mainly from medium/ small cities and towns.

According to Bai (2006), “the price rise definitely deprived poor students of the opportunity to receive higher education. Although there are no statistics available to show the negative impact on rural education, reports about increased drop-outs in some rural junior high schools, and of students who passed the university entrance examination but did not enroll, indicate that the tuition fee hike and the gloomy graduate employment opportunities have caused concern among rural families and students.”

“There was absolutely no way I could afford college. I’m the only child in the family but I have grandparents who are sick. So the money my parents make pays for their medical bills. I

discussed the possibility with my parents in May and then decided to discontinue my school. The tuition and fees for college are ridiculously astronomical. I can't bring myself asking my parents for that kind of money, especially when I see they have so much financial burden on their shoulders." Wu Xiaoli said in an interview (Liu, 2008). She dropped out of high school in May, 2003, a semester before the NCEE. "I didn't want to take the exam. Either way, I thought it would do me no good. If I got a good grade, my parents would feel very guilty not to let me go to college. So I just didn't take it."

In summary, with scarce economic, cultural and social capital, rural students are vulnerable to having restricted access into higher education. The financial pressure for college, combined with the unpromising job market, constitute a power that pushes rural students and their parents for something near and secure. Consequently, they're involuntarily locked up in the vicious circle of little education – little participation in socio-economical production. Though they may be conscious enough of future benefits bringing by education, post-reform higher education to them seems the most costly and risky of all means to change a socio-economic status.

## CHAPTER 5 HIGHER EDUCATIONAL STRATA DIFFERENCES IN ACCESS

In recent studies about educational equality, the difference among social classes has been overshadowed by emphasis on the huge difference between urban and rural areas. It has been manifested by series of studies (Li, 1995; Liu, 1999; Li, 2004) that with wider wealth gap exists in China's social transformation, education is playing the role as the mechanism for social stratification, and class differentials in schools are becoming evident.

The class differential in education is a manifestation of social class differential. Often, the advantaged groups with more economic, social and cultural capital are more likely to receive higher education, while the disadvantaged groups are in a relatively unfavorable position. As the goal of modern education aims at eliminating the constraint in enrollment due to family background, we should know and evaluate the class differential in education objectively, while investigating the causes and mechanisms lying behind those limitations, so as to reduce the difference. Since 1990, the situation of students' family background in higher educational system has changed a lot (Zhong & Lu, 1999; Zeng, 2000; Wang, 2005). But for deficiency in related national statistical data, we can do little to deduce the general class differentials in education. Therefore, I can only cite some results of former case studies, surveys and partial investigations that are done by other scholars to describe the change.

### **5.1 Changes in Higher Educational Student Family Backgrounds**

The idea of "equality of education" is established upon the mainstream ideology of Class Theory in new China, which emphasizes education for most people, gives priority to children of

workers and peasants, and aims at bringing up proletarian intellectuals. As a result, a class line policy that values family origin and political criterion was formed in higher educational enrollment in the early years of new China. Before 1949, the majority of college students come from advantaged classes and wealthy families (Yang, 2006). But with the implementation of new policy, the children of workers and peasants in higher educational system accounted for 20.5% in 1952, 55.28% in 1958 and 71.2% in 1965 (Ma & Gao, 1998). Taking Peking University as an example, the portion of students with workers and peasants' origin is 30.8% was 1957, 64.8% in 1960 and 41.5% in 1964. Moreover, the number reached its highest in 1974 during the period of Cultural Revolution, of 78.6% (Li, 2003). As previously mentioned, this phenomenon was not the natural result of academic competition but was pushed forward by political force.

When performance standards replaced former mandatory political criteria after 1977, the situation changed that portions of children of workers and peasants fell rapidly while children of cadres and intellectuals increased significantly.

### **5.1.1 Case Study of Peking University**

As illustrate in Figure 5.1 and Table 5.1, the freshman who came from worker or peasant's family accounted for 27.5% in 1978, while students with cadre, military or intellectual's family background held 52.2%, and the other took 20.3%. To the contrary, in 1991, those proportions in turn were 37.1%, 62.3% and 0.6%.

Among the three curves shown above, only the change in students with intellectual background remained almost the same, with a slight increase of 2 percent from 1978 to 1991.

While the portion of children of workers and peasants fell at the beginning of the 1980s due to the cancellation of protective policy, it then rose by 17% to its highest level of 44.6% in 1985, but again fell to 37.1% in 1991. Compared with 1978, it had increased by nearly 10% in total.

Figure 5.1 Changes in Freshman Background Composition in Peking University from 1977 to 1991

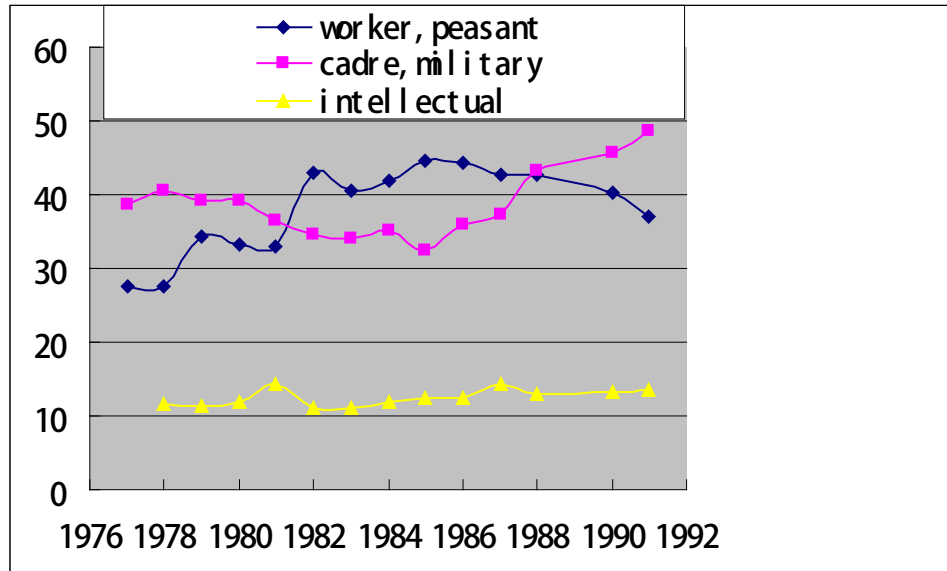


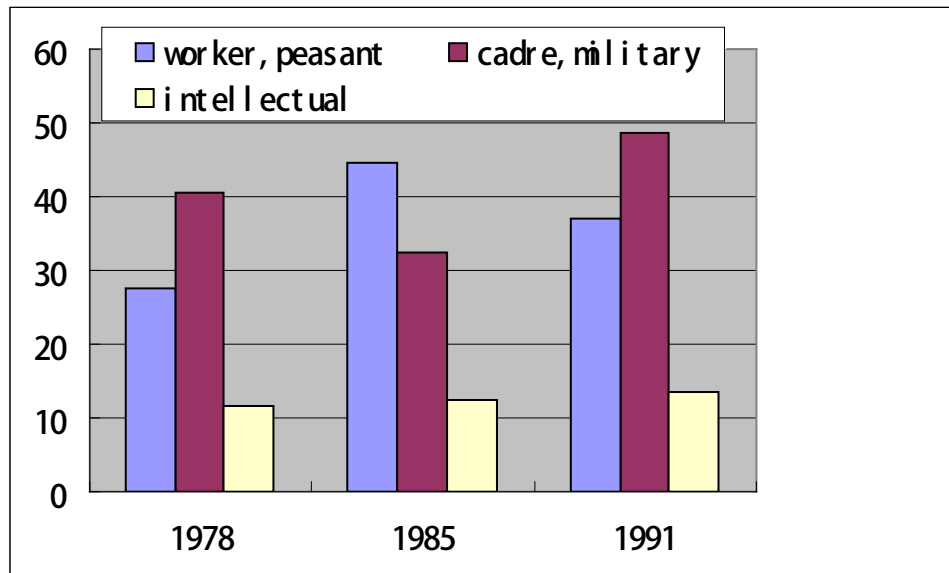
Table 5.1 Changes in Freshman Background Composition in Peking University from 1977 to 1991

	Worker/Peasants	Cadre/Military	Intellectual	Other
1977	27.5	38.7		
1978	27.5	40.6	11.6	20.3
1979	34.4	39.2	11.4	15.0
1980	33.3	39.2	12	15.5
1981	33	36.4	14.2	16.4
1982	43.1	34.6	11	11.3
1983	40.5	34.1	11	14.4
1984	41.9	35.2	12	10.9
1985	44.6	32.3	12.4	10.6
1986	44.4	35.9	12.3	7.3
1987	42.7	37.3	14.4	0.6
1988	42.8	43.2	13	1
1990	40.4	45.7	13.3	0.6
1991	37.1	48.7	13.6	0.6

Source: Li, W. S. (2003). Chinese economic development strategy and equality of higher educational access opportunity. In Liu, H. F. (Ed.), *Equality and efficiency: Higher educational reform and development in 21th century*, 425. (in Chinese)

The cadre/military curve also changed significantly, with its portion varying from 40% in 1978 to a lowest level of 32.3% in 1985 and highest of 48.7% in 1991, which in all increased by 8%, as shown in Figure 5.2 below.

Figure 5.2 Comparisons of Students' Background in 1978, 1985 and 1991



Although the change in Peking University is a case study, it still has somewhat instructive meaning. In consideration that professionals and technical people only account for 5.43% and cadre 2.02% in the national employment structure in 1995 (Li, 2003), the over-half portion that their children take in these key universities cannot be overlooked.

### 5.1.2 National Surveys

Below I sorted out some research done by domestic scholars in order to show the change in higher educational students' family background since the 1990s.

#### 5.1.2.1 Survey of 37 Universities in 1998 by Xie

In 1998, Xie chose a sample size of 69,268 that consists of freshman (enrolled in 1997) and senior (enrolled in 1994) students in 37 universities overall to conduct his survey. The results are

shown in Table 5.2 below. It suggests that students with urban origin represented 52.8% in total while those with rural origin are less. And children of professionals, cadres and managers account for 32.8%, compared with children of workers and peasants of 20.8% and 31.4%. Moreover, students with different family backgrounds vary significantly in their distributions in the tiers of higher educational system. (Zeng, 2000)

Table 5.2 Strata Distributions of University Students, 1998

	cadre	profession al	manager	Self-employ ed	worker	peasan t	militar y	other
Total	11.7	12.7	8.4	4.4	20.8	31.4	0.7	9.9
1 <sup>st</sup> -tier (National)	14.4	16.4	10.3	3.7	23.1	21.8	0.8	9.5
2 <sup>nd</sup> -tier (Ministry)	12.6	14.4	8.9	5.0	19.5	30.8	0.5	8.3
3 <sup>rd</sup> -tier (Regular)	9.7	12.0	8.2	3.5	23.4	29.8	0.8	12.6
4 <sup>th</sup> -tier (Local)	9.5	7.1	6.0	5.6	17.2	45.6	0.6	8.4

Source: Zeng, M. C. (Ed.). (2000). *Economic Analysis on Educational Policy*. Beijing: People's Education Publishing House, 268. (in Chinese)

If we rearrange the table above to calculate the first three occupations together, we would find an inverse relationship between university types and their corresponding portions, with 41.1%, 35.9%, 29.9% and 22.6 respectively. However, to mix the children of workers and peasants together, the relationship would be positive, with an ascending order of 44.9%, 50.3%, 53.2% and 62.8%.

### 5.1.2.2 Survey of 14 Universities in 1998 by Zhong and Lu

Another survey done in 1998 includes a sample of 13,511 from 14 universities that locate in cities like Beijing, Nanjing, Xi'an and so on. As shown in Table 5.3, if we categorize father's occupation, the finding suggests that children of cadre, professional, teacher and manager

account for 45.3% in total, while those of worker and peasant backgrounds take 47.1%. (Lu, 1999)

Table 5.3 Parental Occupational Distributions in 14 universities, 1998

	Cadre	Professional	Teacher	Manager	Worker	Peasant	Other
Father	15.0	13.5	7.9	8.9	17.7	29.4	8.0
Mother	5.5	8.9	8.1	3.9	22.4	40.2	11.0

Source: Lu, G. S. (1999). *Cost recovery in higher education*. Hong Kong: Hong Kong Chinese University, 56. (in Chinese)

Worth mentioning here, based on survey results of father's occupational status in 1995 national census, cadre held only 2.02% in all employments, while the portion of their children enrolled in higher education was as high as 15%. Additionally, if we further include the category of manager, the portion would be above 23%. And the situation of professional was much the same, with 5.43% in employments and 13% in undergraduate population. However, as the population of peasant in employment took 69.4%, the participation rate in higher education of their children was only 29.4%. (Yang, 2006)

### 5.1.2.3 Survey of 34 Universities in 2004 by Xiamen University

A seminar was held in College of Education, Xiamen University in 2004 to conduct research in provinces like Shaanxi, Fujian, Zhejiang, Hunan, Guangdong, Guangxi, Anhui, and Shanghai. The total sample of 7,264 came from 34 universities, which included 8 key universities that affiliated to Ministry of Education, 8 public provincial universities, 11 public vocational colleges, 3 private vocational college and 4 independent institutions. They accorded to the standard occupational classification method set by the department of Sociology in Chinese Academy of Social Sciences and divided structure of society into ten strata. The distributions of students' family backgrounds are shown below in Table 5.4.



Table 5.4 Distributions of Undergraduates' Family Backgrounds in 34 Universities, 2004

	Social Class A	Sample Proportion B	Mobility Rate B/A	Key univ. B1	Provincial univ. B2	Public Voca. B3	Private Voca. B4	Independent B5
1. Cadre	2.1	8.2	3.90	11.5	6.6	5.7	9.7	10.9
2. Manager	1.6	4.0	2.50	3.8	2.9	3.5	4.8	8.9
3. Private Entrepreneur	1.0	5.9	5.90	4.3	3.5	2.0	10.7	17.7
4. Professional	4.6	12.3	2.67	16.6	11.9	10.0	11.2	9.3
5. Office Clerk	7.2	6.0	0.83	6.7	5.5	5.2	6.2	8.0
6. Individually-owned Business	7.1	16.8	2.37	10.7	17.3	18.4	23.3	22.0
7. Business service	11.2	5.7	0.51	4.2	5.5	7.0	6.0	6.1
8. Industrial worker	17.5	13.3	0.76	13.4	14.7	14.9	12.4	9.1
9. Peasant	42.9	25.5	0.59	27.3	29.5	30.6	12.6	6.3
10. Unemployed	4.8	2.2	0.46	1.6	2.5	2.7	3.1	1.6
Total	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0

Source: Wang, W. Y. (2005). A study of the difference in higher education access opportunity for children in different strata in China. *Private Education Research*, 2005(4). (in Chinese)

The concept of “mobility rate” (the number of undergraduates from certain strata divided by total population of this strata, B/A) (Wang, 2005) was used in this research to show the difference in higher educational access opportunity of different social strata. If B/A equals 1, then it stands for the most equal condition in which the portion of undergraduates in school is the same as this strata’s portion in the total population.

The result suggested that the mobility rate of cadre, manager, private entrepreneur, professional and individually-owned businessman ranged from 2.37 to 5.9, which were 2 to 6 times higher than the average. Among all, the highest mobility rate came from the group of private entrepreneurs, as compared with the lowest value in unemployed group of 0.46. The difference in mobility rate between these two extreme groups was 13 times, which showed that children from higher social strata had more access advantages than lower social strata.

To be specific, in key universities, the mobility rates (B1/A) of cadre and professional were the highest, of 5.48 and 3.6 respectively. The biggest difference in mobility rate was 17 times, which meant children of cadres had 17 times higher access opportunity into key university than

children of unemployed. This difference reduced to 7 times in provincial universities and 5 times in public vocational colleges. Thus we can conclude that, within the public higher educational system, the strata difference is mainly reflected on the access opportunity into those top-tier key universities.

Although children of private entrepreneurs had the highest mobility rate, they were largely concentrated in private colleges and independent institutions. For reasons of much higher tuition fees in those higher educational institutions, mobility rates of children of private entrepreneurs and managers thus were highest, whereas circumstances for business servicemen, industrial workers and peasants were considerably lower.

If we merge certain occupations into some larger categories, then the results can approximately reflect distributions of children from different social strata in different tiers of Chinese higher educational system. The former 4 strata (cadre, manager, private entrepreneur and professional) account for 9.3% in total population, whereas their offspring represent 30.6% in undergraduates, or 3 times their proportion in total population. The distribution in medium strata (office clerk, individually-owned businessman, business serviceman) is more rational comparably, with their share 25.5% in the total population and 28.5% in undergraduates. However, as for the disadvantaged groups, they only account for 41% in undergraduates, with their proportion in total population as high as 65.2%. The biggest difference appears in the peasant strata, which takes 42.9% of the total population but only 25.5% of their children's participation rate in higher education. The mobility rate of this stratum is the lowest, at 0.59. (Wang 2005)

Because different research findings vary in school types they focus on, we cannot compare them directly. In my study, the focus is mainly on provincial and vocational colleges, but we still

could extract the public universities' data to make comparisons with the other research results. Table 5.5 compares Xiamen University's 2004 survey with Xie's 1998 research (see Table 5.2). Although the comparison is not rigorous enough, a rough tendency has emerged: in key universities, the percent of children of cadre and manager increases 3.7, which shows they have benefited most after higher educational expansion. Meanwhile, the percent of children of professionals increases only 1. The most disadvantaged group is not peasant but worker, which decreases by 7.9% in key universities and 5.6% in provincial universities. This evident decrease reflects the widening gap among strata in urban areas in recent years. The higher educational access opportunities of children of workers should be affected by this phenomenon. Last, the proportion of children of peasants doesn't change markedly in key universities but decreases by 8.2% in provincial universities.

Table 5.5 Changes in University Distributions of Children from Different strata from 1998 to 2004(%)

		Cadre, manager	Professional	Worker	Peasant
Key university	1998 – 37	11.6	15.4	21.3	26.3
	2004 – 34	15.3	16.6	13.4	27.3
Provincial university	1998 – 37	8.35	9.55	20.3	37.7
	2004 – 34	9.5	11.9	14.7	29.5

In terms of differences in samples, methods, classification standards, it should be emphasized again that such comparison cannot be rigid. What we could learn from these quantitative studies is the changing process that takes place now in the higher educational system.

In order to update the general condition of strata difference in higher educational institutions, results of two case studies will be presented in the next (Yang, 2006).

The distribution of 1995-enrolled undergraduates' family background in Wuhan University, one of national key universities, is: Party cadre 8.3%, business cadre 23.8%, technical professional 20.9%, private entrepreneur 0.9%, military 0.4%, worker 22.2%, and peasant 23.1%. The cadre in all takes 32.1% and worker and peasant holds 45.3%.

The distribution of family background of 1998-enrolled undergraduates in another national key university, Beijing Institute of Technology is: cadre 27.0%, intellectual 9.4%, clerk 3.6%, military 2.1%, worker 26.4%, peasant 18.7%, and other 12.2%. After integration, the children of worker and peasant accounts for 45.1%. From the above two case studies, we may find some overall characters: in contrast with universities that dominated by science and engineering, the students from cadre and intellectual backgrounds take more advantages in those art and design universities.

## **5.2 Student Discipline and Major Distributions of Different Family Backgrounds**

It has been noticed that quality difference in higher education, such as the student's distribution in disciplines and majors, has an increasingly high relationship with social strata.

Table 5.6 shows the distributions between family backgrounds and majors of 2003-enrolled undergraduates in Beijing Institute of Technology (Zhou M., 2005), from which we can observe that the children of advantaged groups are more likely to enroll in selective or art and design majors while children of workers or peasants are more likely to enroll in other less favorable majors.

Fang (1996) pointed out that such strata differences observed in Chinese higher educational major distributions may be the unique character in this system. He did a survey in Fujian province early in 1990 to investigate 1,708 undergraduates' family backgrounds. In those selective and demanded majors, students coming from intellectual, cadre and manager families accounted for 57.24%, while those whose parents were workers and peasants represented

34.06%. Meanwhile, inverse proportions were manifested in other less selective majors, with 38.3% of students from intellectual, cadre and manager backgrounds and 50.17% from worker and peasant.

Table 5.6 Distributions between Family Backgrounds and Majors of 2003-Enrolled Undergraduates in Beijing Science & Engineering University (%)

major family	Information Technology (Selective)	Mechanical & Electrical Technology (Less selective)	Art & Design (Arts Discipline)
Manager, professional	57.3	35.3	58.3
Clerk, private entrepreneur, other	17.2	21.6	12.2
Worker, peasant, unemployed	25.4	43.1	29.5
total	100.0	100.0	100.0

Source: Zhou, M. (2005). *Strata differences in Chinese higher educational access opportunity*. Master thesis of Beijing Institute of Technology. (in Chinese)

Moreover, the survey on 1995-enrolled undergraduates in Wuhan University also showed the impact of strata character on major distributions (Table 5.7). The advantaged groups have the highest percentage in selective majors like international trade, international finance and computer, whereas in other less selective majors like math and history, children of worker and peasant are relatively overrepresented. (Liu, 1996) Yu's study, which investigated 2000-enrolled undergraduates' major distribution in a certain College of Electricity, also confirmed similar results (Table 5.8). On the one hand, the foremost five majors in which children of cadres enrolled most were economics, electrical engineering and automation, computer science and technology, electronic information and communication technology, and accounting. All of them are the most selective majors in this university. On the other hand, children of workers were more concentrated in majors like math and applied math, computer science and technology, heat energy and power engineering, electric engineering and automatic, and automation. These majors

are less selective comparably. Last, as to children of peasants, the highest shares were in majors of electricity supply and use technology, physics, heat energy and power engineering, constructional environment and facility engineering, and chemistry, which are almost the least selective majors. Especially in the rural-oriented major of electricity supply and use technology, the percent of children of peasants was as high as 61%. (Yu, 2002)

Table 5.7 Family Backgrounds and Major Distributions of 1995-enrolled undergraduates in Wuhan University (%) Sample size: 1,890

Family background	Peasant	Worker	Party Cadre	Business Cadre	Professional	Private Entrepreneur	Military
Total	23.1	22.2	8.3	23.8	20.9	0.9	0.4
Math	21.0	25.8	9.0	18.0	16.9	3.8	--
History	29.5	22.7	4.5	26.1	13.6	1.1	--
Computer	12.2	23.1	7.7	23.1	28.6	1.1	1.1
International trade	11.4	11.4	20.0	34.3	22.9	--	--
International finance	12.0	4.0	12.0	34.0	38.0	--	--

Source: Liu, H. Y. (1996). Endeavor to create equal educational opportunity to youth – Survey on 1995-enrolled undergraduates of Wuhan University. *Youth Research*, 1996 (4). (in Chinese)

These phenomena are partly due to the relatively lower tuition fees and some favorable policies like directed education in the less selective majors, which are very attractive to those poor students. Because administration offices in universities have almost monopolized power on decisions of major adjustment, the distributions of advantaged groups in those selective majors make us aware of influences of social capital. That's the reason why in arts and design discipline, in which universities have the largest self-decisive power on enrollment, such strata character reveals the most.

Table 5.8 Major Distributions of 2000-Enrolled Undergraduates' in College of Electricity (%)

	Cadre	Worker	Peasant
Economics	45	18	37
Electric engineering and automation	41	31	28
Electronic information and communication technology	40	27	33
Computer science and technology	40	35	25
Accounting	38	24	38
Financial management	35	27	38
English	34	30	36
Physics	33	13	54
Automation	29	31	40
Math and applied math	28	41	31
Electric-counted accounting	26	28	46
Constructional environment and facility engineering	26	24	50
Chemistry	24	28	48
Chinese language and literature	24	29	47
Electricity supply and use technology	23	16	61
Heat energy and power engineering	16	32	52

Source: Yu, X. B. (2002). Investigation on Chinese social stratification and higher educational opportunity – A positive study on 2000-enrolled undergraduates in a certain university. *Modern University Research*, 2002 (2). (in Chinese)

### 5.3 Relationship between Family Backgrounds and Enrolled NCEE Scores

Not only has the major distribution had strata character, it has been confirmed by several researchers that such character also shows in the difference between NCEE scores of enrolled students.

Table 5.9 reveals 2003-enrolled undergraduates' NCEE score of a certain university in Beijing. Generally speaking, children from lower strata families have higher enrollment scores than those in higher strata. The descending order of average scores among family origins is: peasant, laid-off worker, individually-owned businessman, worker, clerk, medium-high level manager and professional; which are approximately opposite to their social class hierarchies. Overall, children of high-level managers and professionals have the lowest enrollment average score (571.3). It is less than children of peasants (610.1) by 38.8 points, children of workers by 26.2 points and children of laid-off workers by 35 points. (Zhou M., 2005)

Table 5.9 2003-Enrolled Undergraduates' NCEE Scores in a Certain Beijing University (point)

	Selective major			Less selective major			Arts major		
	Mean A	Lowest B	A-B	Mean A	Lowest B	A-B	Mean A	Lowest B	A-B
High-level Manager, Professional	590.9	521	69.9	575.8	546	29.8	547.3	300	247.3
Medium-level Manager, Professional	591.4	469	122.4	568.1	500	68.1	599.3	576	23.5
Worker	602.5	549	53.5	591.0	548	43.0	559.0	501	58.0
Peasant	611.0	590	21.0	607.3	598	9.3	618.0	618	0
Private Entrepreneur	601.3	580	21.3	578.0	531	47.0	543.0	408	135.0
Laid-off, Unemployed	594.0	584	10.0	613.2	586	27.2	603.5	593	10.5

Source: Zhou, M. (2005). *Strata differences in Chinese higher educational access opportunity*. Master thesis of Beijing Institute of Technology. (in Chinese)

The difference between highest and lowest enrollment scores of different strata in selective majors is 20 points and in less selective majors 37.4 points. Further, in art and design disciplines, this gap could be 318 points. Obviously, children with medium-high level managerial and professional origins who possess more social capital are the most beneficial strata during the process. They've enjoyed the largest enrollment score difference that could be enrolled in selective majors with less than average 122 points and in arts major 247 points. The private entrepreneur strata who own more economic capital also get benefits, with their children enrolled in art and design discipline with an average of 135 points lower. Here, children of peasants enjoy zero benefit in art and design discipline enrollment, which relies heavily on parents' social relations and economic ability.

To better substantiate our analysis, Table 5.10 presents result of Yu's study on enrollment scores of 2000-enrolled undergraduates of a certain College of electricity. Among all, children of peasants have the highest average score, which is higher than children of cadre by 22 points and children of workers by 18 points. Specifically, the enrollment score of children of peasants is



higher than children of cadre by 26 points in engineering disciplines and by 30 points in finance and economics disciplines. (Yu, 2002)

Table 5.10 Enrollment Scores of 2000-Enrolled Undergraduates in College of Electricity (point)

	Total	Engineering	Finance and Economics	Arts	Science
Cadre	512	511	509	521	512
Worker	516	530	517	514	512
peasant	534	537	539	525	530

Source: Yu, X. B. (2002). Investigation on Chinese social stratification and higher educational opportunity – A positive study on 2000-enrolled undergraduates in a certain university. *Modern University Research*, 2002 (2). (in Chinese)

It is astonishing to see such huge differences in enrollment score of students from various strata and their major distribution. The seemingly “equal to everyone” and score-decided NCEE still has a long way to go towards the real equality.

The higher enrollment scores of rural students results from an “urban-centered” enrollment system. Those provinces in which rural students are a majority, however, have relatively less enrollment quota and thus lower enrollment rates. Consequently, their enrollment scores are pushed up even higher than those in cities such as Beijing and Shanghai for more than 100 points. Therefore, only the most excellent rural student that performs much better than urban students can be enrolled into higher educational institutions. As to urban areas, things are still complicated. The students from lower strata often have higher enrollment scores, which subverts “cultural capital” theory. We cannot effectively explain this phenomenon by existing data and it needs further study. The market factor that may erode the enrollment standard, plus misbehaviors during enrollment process, are both believed to be reasons behind this, but we’re not sure whether or not they’re primary causes.

The findings above have showed changes in strata differences to some extent in Chinese higher educational access opportunity before and after the expansion.

In the beginning of the 1950s, the socialist new China stressed equal access to all and educational rights of worker and peasant class, and adopted a protection policy in order to expand higher educational opportunities to worker and peasant classes. At that time, children of workers and peasants benefited most from this policy and their educational opportunities were enhanced substantially as a result. However, with subsequent social transformation and the formation of advantaged groups, new social environment and interests are gradually taking shape in the process, which affect higher educational policy indirectly. The same situation has also occurred in the former Soviet Union – the children of workers and peasants enjoyed greater benefits than the capitalist class in the early years of new regime. In 1931, 58% of undergraduates were of worker or peasant family origin; but the scale reduced to 10% at the beginning of the 1950s, with about half of students coming from various upper classes (government officials, military and Party clerk). The Soviet Union then gave educational priority to student with recommendation from industrial or agricultural organizations, which aimed at increasing the portion of relevant classes in university (Born, 1975). Comparably in China, a similar “class course” policy was adopted to guarantee the access opportunities for children of workers and peasants during 1960s and the period of Cultural Revolution.

We need to find out the basic motivation that lies behind the widening gap among social strata in Chinese higher education after the 1990s. It has been suggested by former studies that such an outcome is the accumulation and continuation of strata differences in secondary education, which resulted from separate-governed urban-rural structure and quality division of key middle schools. The student’s family background then stands for a significant factor in determining

which secondary school to enroll, which seems like a competition based on parents' social capital.

On the other hand, as family economic capital has little influence on secondary educational access opportunity (free education), it does weigh much heavier power on higher education. In some high-tuition private vocational and independent institutions, the proportion of students with private entrepreneur, individually-owned business or cadre origin is considerably large. The increasing distribution of children of upper class in key universities is the natural outcome of higher urban enrollment rates; meanwhile it can be seen as a manifestation of the influence of family cultural capital. But the strata character in major distribution and enrollment scores may rely more on social capital of a typical Chinese feature. In the almost opaque enrollment process, we cannot easily figure out how important the role human factors play. Obviously, in a complete equal and just examination and enrollment system, the difference in access opportunity should mainly be the difference in individual learning ability and the influence of family cultural capital. However, in today's China's political environment, it's hard to measure how and to what degree each factor has affected the result. There is raised a question as in consideration of widening strata differences in higher education, to whether it is derived from influence of cultural capital, or from some unequal privileges.

As to precisely measure higher educational strata difference, or to evaluate specific effects of economic capital, cultural capital and social capital quantitatively, there is required macro-statistics or scientific sampling, large sample size surveys. Because I'm unable to conduct such research in my study, I hope my analysis of strata differences based on some local and segmental information could provide a general and suggestive start to the next necessary phase.

## 5.4 Conclusion

The strata differences in higher educational access opportunity are showed not only quantitatively but also qualitatively. There have been distinct disparities between students from various family origins and their distribution in tiers of higher educational system. Children of cadre, professional and intellectual strata, whose families own more cultural and social capital, are advantaged in national key universities. For example, children of cadres have 17 times higher enrollment rate than children of unemployed in key universities. Moreover, children of private entrepreneurs and individually-owned businessmen are highly overrepresented in private colleges and independent institutions, whereas children of peasant and unemployed often have the lowest share in higher educational institutions and selective key universities.

The major distribution in the higher educational system reveals clear strata differences. Children of advantaged classes are more likely to enroll in selective majors while children of workers and peasants consequently are forced to choose less selective majors.

Last, even through the uniform National College Entrance Exam, the enrollment score still can reveal some sort of strata difference. Children of lower social classes generally have higher enrollment scores than upper classes, among which children of peasants have the highest enrollment scores. Thus the “equal to all” entrance exam in reality does have quite a long way to go towards real equality.

## CHAPTER 6 CONCLUSION

With public acknowledgement of the concept of the “knowledge market,” higher education has become the focus of Chinese citizens. However, the insufficient monetary contributions from government and the shortage of education funds in institutions have largely restricted further development capacity of the Chinese higher education system. Within such a context and in order to extensively mobilize social forces to maximize economic and social development, the Chinese government finally decided to charge students instead of adhering to its original tuition-waiving policy. Unexpected issues of inequality concerning access were raised in the post-reform era when tuition standards kept rising to an irrational level. Many critics of high tuition and industrialization of education have emphasized the unequal access privileges of certain groups. Therefore, the thesis explored the current status of Chinese students’ access to higher education after reform, especially from the perspective of urban-rural and strata differences among students with different social origins and family backgrounds. It aimed to examine degrees of inequality of opportunity in the Chinese higher education system.

After synthesizing previous research results with the past ten years’ national and provincial educational statistics data, the findings have suggested that, despite the progress made in equalizing access by urban-rural or/and strata origin at the mass higher education era in China, disadvantaged groups either from rural areas or from low socioeconomic strata retain their inferior status in accessing higher education, as compared to their urban or high socioeconomic counterparts of advantaged groups. Disadvantaged groups constitute a disproportionate part of

the student body in Chinese higher educational institutions. Their access to higher education, especially to those highly selective universities, has not improved as much as expected. To be specific, the initial quantitative access differences are gradually turning into qualitative disparities, where the higher the demand for the university or/and the major, the more urban and higher socioeconomic students enroll. Consequently, rural and lower socioeconomic students are channeled into provincial post-secondary institutions that are less prestigious. This is exactly the basic distribution trend in Chinese higher education system today.

The theories of financial, cultural, and social capital were employed in the thesis and provided a plausible explanation to the continuing disadvantaged status of poor groups. Traditionally, three factors that consistently influence student academic success in education are economic capital, cultural capital, and social capital. In brief, student academic success is a function of individual learning capacity and the academic quality of school, as well as the amount of various resources or capital that they receive either from the home, the school, or both. When tuition increases, the heavy financial burden would firstly exhibit the power of economic capital – the higher the educational and occupational level of the family, the higher the budget for educational expenditure. Therefore, if tuition standards of various institutions and majors are mainly determined by market demand, then poor students from rural areas or low strata are forced to choose less selective schools and disciplines that have cheaper tuition. Further, the effect of cultural capital on access can be interpreted as student academic motivation and enthusiasm, which are crucial to a successful educational career. In a sense, cultural capital can contribute to the advantaged students' good standings in academic pursuits early in their elementary and secondary education. Last but not least, social capital weighs more in China, which maybe a typical Chinese characteristic in the education system. The influence of social class on

educational outcomes can be understood as the higher socioeconomic classes having more opportunities to use their network or relationships to achieve better education for their children. This is most evidently manifested in the disproportionate distributions of urban and upper strata students in high-level universities and hotly demanded majors, evidenced specifically by the difference in enrollment NCEE scores between advantaged and disadvantaged groups.

Skyrocketing tuition fees and an observable gloomy job market greatly discouraged parents from sending their children to selective universities or choosing expensive majors.

Comparatively, advantaged families with capital, endeavor to have their children enroll in preferred institutions and disciplines. A reformed educational policy is needed to change the current interrelationship between access to higher education and family origin, and to increase the proportion of disadvantaged groups in higher education both quantitatively and qualitatively. This needs to be done within an overall improvement of the social and economical environment for disadvantaged groups: the development in their economy, the better financing and job placement policies in higher education, and perhaps an educational program targeting drop-outs in the countryside.

It would be helpful in future research to examine disadvantaged groups' collective and/or individual resistance to see if they act as active agents of change or simply passive receivers of environmental forces. Also helpful would be a more detailed, geography-specific study, for example, examining students in western China and in minority populations.

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