A PRELIMINARY STUDY OF THE FUNDING GAPS BETWEEN URBAN AND RURAL SCHOOLS IN SHANGHAI, CHINA 2004-2011: AMARTYA SEN’S CAPABILITY APPROACH

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A PRELIMINARY STUDY OF THE FUNDING GAPS BETWEEN URBAN AND RURAL SCHOOLS IN SHANGHAI, CHINA 2004-2011: AMARTYA SEN’S CAPABILITY APPROACH

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CHAPTER I
INTRODUCTION

Background

Since 1970s, China has gradually shifted from the centrally planned economy to the socialist market economy under the government’s macro supervision (Mazurek & Winzer, 2005). To Chen (2009), the Third Plenary Session of the 14th Communist Party of China (CPC) Central Committee’s policy document entitled “The Decision of the CPC Central Committee on Several Issues Concerning the Establishment of a Socialist Market Economic Structure in 1993” further established the basic framework for the Chinese socialist market economy. In 2004, the Association of South East Asian Nations recognized that China has successfully and completely transformed from a Planned Economy into a Market Economy in 2004 (He, 2004). People have different opinions about when China transformed from a Planned Economy into a Market Economy. This study will focus on data from 2004, the year when China was recognized as shifting to a Market Economy internationally.

Compared to other countries, large labor population and low labor cost are the main advantages of China. Under the Market Economy, the Chinese government has made efforts to promote a labor-intensive industry in manufacturing. Combining developed countries’ technologies and China’s low labor cost, products made in China
have dominated European and American markets. It is not surprising that China has been perceived as the “world’s factory” in recent years. However, with about six hundred and fifty million people living in rural areas, farmers, who make up about 50% of the population, are an important component of China’s labor force (National Bureau of Statistics of China, 2012). Solving the “Three Rural Issues” has always been the top priority of the Chinese government agenda. The “Three Rural Issues” refers to the farmers’ issues, the rural areas’ issues, and the agriculture issues. The farmers’ issues include low income, polarized living standards between people in urban areas and rural areas, and farmers’ rights to equal educational opportunities, social security, and health insurance. The rural areas’ issues mainly refer to the economical underdevelopment of rural areas in comparison with urban areas. The agriculture issues mainly refer to low income of farmers and the low degree of industrialization. These issues cause social problems like the polarization between the rich and the poor, and the inner migration in China, and so on.

In 1998, the Central Committee of the Communist Party of China clearly stated that the fundamental way to promote agricultural development lies in science and technology, which emphasize the significance of education in agricultural development. In 2002, the Sixteenth National Congress of the Chinese Communist Party advocated to accelerate the development of rural education, and harmonize rural and urban development. In 2007, the Seventeenth National Congress of the Chinese Communist Party called for providing farmers with advanced education in technology and business management. In 2012, The Eighteenth National Congress of the Chinese Communist Party continued to advocate for the improvement of the synchronized development of
industrialization, informatization, urbanization, and agricultural modernization. These acts of governmental advocacy strengthened the basic support of modern agriculture, and further advanced the construction of the new socialist countryside.

In 2006, the Chinese government revised the Compulsory Education Law with the intent to reduce the school funding gaps between rural schools and urban schools. More specifically, the government’s effort focused on allocating more resources to support the public education in economically challenged areas in order to narrow the gaps of education between rural areas and urban areas (Zeng et al., 2007). It also focused on facilitating a more balanced educational system so that each citizen can have access to quality education. Since 2001, the government has implemented tax reforms to waive rural citizens’ supplementary fees and taxes for education (Zhao & Bruno, 2011). Even though the Chinese government has made efforts to facilitate educational development, gaps in teachers’ salary and instructional resources, continue to exist between rural schools and urban schools (Zhang & Zhao, 2006). According to Zhao & Bruno (2011), there is a widespread belief that “larger schools are more efficient and, therefore, enable economies of scale in the provision of educational services” (p. 249). Zhao & Bruno (2011) point out that local government tends to prioritize funding for the consolidated central schools in order to improve their conditions; therefore, most of the small rural schools do not receive adequate funds. Zhao & Bruno (2011) also stated that because of poor working conditions, including low salaries and poor living conditions, rural schools generally have difficulty attracting qualified teachers. In addition, children in rural areas who are left behind academically represent a new challenge emerging in recent years (Zeng et al. 2007; Bao, 2006; Wang & Zhao, 2011; Yao, 2012). Children who do not live
with parents lack parental support, and many grandparents do not have enough knowledge to help these children with their homework. Moreover, parent-child separation may cause personal and social problems on left-behind children. Wu & Yu (2004) stated that many left-behind children in rural schools appeared to be introverted and lack social skills, while others were short-tempered.

Xu (2010) stated that students from low-income families usually enter into less prestigious universities and get low-paying jobs as a result of their parents spending less on compulsory education. Some students in ordinary universities worry about their future and doubt whether it is a right choice to get higher education. As a teacher for six years in a Chinese college, I also heard a significant number of students, especially students from low income families in rural areas, express concerns about whether it is worth spending money to pursue higher education rather than finding a job to earn money and experience. This is unequal to students from low-income families, since they may be admitted to better universities if they have access to better education. Since the implementation of these economic policies, China has made great achievements in economic development. Both the urban and rural environments have changed dramatically, and people’s living standards have been greatly improved. However, unbalanced development between rural and urban communities still exists and the educational gap is growing wider. According to Bao (2006), rural development has lagged far behind the urban development, especially in education. The public educational policies have been “city-oriented”, for example the public educational resources are allocated unfairly to urban schools and the majority of high-quality education resources are distributed to cities (Bao, 2006). To illustrate, the government funds for rural compulsory education were much less than the
funds for urban compulsory education in 2001, with a significant statistical difference of 39.14% on the average budgetary current expenditure for education in regular junior secondary schools and 70.52% on the average budgetary funds for education in regular primary schools in that year. Also, the number of full-time teachers in primary schools in rural areas was 20.69% less than that in urban areas in 2001 (Bao, 2006).

Statement of the Problem

Under the planned economy, the Chinese central government was responsible for establishing and funding P-16 schools. Under market economy, even though the central government still has control on over the sizes of schools and numbers of enrollment, Chinese education is experiencing significant changes. First, the central government encouraged the establishment of more private schools under the market economy (Zhao, 2009). Second, compared to the highly centralized decision-making policy under the planned economy, the central government is no longer the only decision-maker, and schools have more decision-making power (Zhao, 2009). Third, teachers are no longer assigned to designated schools (Yu, 2002), they are able to apply for teaching positions in their preferred schools.

The unbalanced development of the economy also causes problems for education. One strategy for economic development under the market economy in China is to let some areas prosper ahead of other areas, and then those areas that have prospered who prosper should help other poor areas to get prosperity (Masurek & Winzer, 2005). More specifically, China focuses on facilitating the economic and cultural development of the East Coast including Shanghai, Guangzhou, Shenzhen, and Zhuhai. As a result, the economy and educational resources in these areas are much better than that of Central
China, Western China, and Northeast China. To illustrate, a great number of high
technology parks and special industrial and economic zones were established in the
eastern coastal areas. Economic development brings educational improvements, including:
better campuses, better teaching facilities, more qualified teachers, and so on. However,
there are problems with this policy. For instance, because of the increasing gap in
economic development between the developed areas and undeveloped areas, increasing
numbers of people from underdeveloped areas migrate to more developed areas for job
opportunities and higher incomes. This development continues to have a negative impact
on the education of children of migrant workers. Despite the implementation of the free
nine-year compulsory education, students from rural areas are not entitled to free public
schools in urban areas. According to the Basic Education Law, all children are entitled to
attend the free nine-year compulsory education in their local school districts (National
People’s Congress, 1986). Local governments finance schooling for local students, but
not for non-local students. Therefore, children of migrant workers are not allowed to get
the free nine-year compulsory education in the destination cities, and they have to pay
high school-place borrowing fees to attend local public schools, or they have to attend
private schools which have not been recognized by the government. Even though
governments take measures (e.g., abolishing school-place borrowing fees) to restrain this
phenomenon, migrant workers still cannot afford many miscellaneous fees (Mazurek &
Winzer, 2005). As a result, rural migrant families pay extra money so that their children
can get education in the public schools of their destination cities, this causes additional
economic burden to them. Furthermore, the government has lost control over the
distribution of qualified teachers and the instructional resources. Attracted by higher
salaries and better working environments, increasing numbers of highly quality teachers choose to work in urban schools, making the education in rural areas inferior to the education for children in urban areas.

Recent research literature on rural education in China examines the current situation, the existing problems in rural education and the solutions that the researchers believe will make differences on the current problems of rural education (Zhao & Bruno, 2011; Zhang & Zhao, 2006 & Bao, 2006). However, the majority of the researchers do not provide data to explicate the funding gap between rural areas and urban areas. For instance, Zeng et al. (2007) advocated for the balanced development of compulsory education between rural areas and urban areas, but they did not offer suggestions as to how to achieve that balanced development of compulsory education. Li (2012), Ding (2008), Zhang & Zhao (2006) recommended that the government increase the investment in rural compulsory education. Yet they did not specify whether the government should increase investment in financial assistance or educational facilities. Without data it is difficult to measure the actual funding gap and to develop specific action plans to bridge the gap. Therefore, their recommendations are too vague to provide practical guidelines to solve the real problems. Above all, the existing research literature has not fully examined the meaning of the funding gap and the need to bridge the funding gap between urban and rural schools.

**Purpose of the Study**

The purpose of the present study is twofold. First, the study aims to compare the funding differences in the free nine-year compulsory education between rural schools and
urban schools in Shanghai. Second, this study applies Amartya Sen’s *capability approach* to analyze the funding gaps between rural and urban schools.

China is a vast country, with 34 provinces (including 4 municipalities, 5 autonomous regions and 2 special administrative regions). Shanghai is one of the four municipalities, and it has an area of 6340.5 square kilometers. In 2010, the rural areas accounted for about 50% of the whole area. The rural population accounts for about 20% of the whole population. In comparison with provinces in the middle area and the western area of China, Shanghai may not have a high rural area-urban area ratio. However, it is the economic center of China, and it is one of the first cities to benefit from the economic development strategy under the market economy. Therefore, in comparison with cities in China, the educational funding gap in Shanghai better reflects how the market economy influences educational development. This study explores the funding allocation on financial assistance to impoverished students (waiving impoverished students’ miscellaneous fees, expenditures for textbooks and excise books, and providing them with cash) and public funds (instructional materials expenses, utility fees like water and electricity, heating expenses, transportation costs, official traveling expenses, printing fee, vehicles purchase costs, office equipment purchase costs, special equipment purchase costs, books and data purchase costs, business entertainment expenses, training expenses, teaching facilities expenses, and maintenance expenses).

Specifically, this study will first conduct an inquiry into the following questions:

Is there difference between the overall financial assistance funds allocated for urban and rural schools in Shanghai? Is there difference between the average financial assistance funds per urban student and the average financial assistance funds per rural
student in Shanghai? Is there difference between the overall public funds allocated for urban and rural schools in Shanghai? Is there difference between the average public funds per urban student and the average public funds per rural student in Shanghai?

In this study, I focus on data collected from official publications, i.e., China Educational Finance Statistical Yearbooks (hereafter abbreviated as CEFSY). The CEFSY are co-written by the Finance Division of the Ministry of Education of the People’s Republic of China, and the Social Science and Technology and Cultural Industries Statistics Division of the National Bureau of Statistics of the People’s Republic of China. All education financial statistical data in the yearbooks was collected from the schools, and then gathered by towns, counties, cities, and provinces according to priority. The CEFSY involves national education expenditures of the central government and the local governments at all levels. Educational expenditures include the overall teachers’ salary and benefits, the overall financial assistance to impoverished students, the overall public funds, and the overall capital construction funds (fixed assets, intangible assets, and land). The current study focuses on the overall financial assistance funds, the overall public funds, the average financial assistance funds per student, and the average public funds per student at the level of Shanghai municipality. Zhang (2010) stated that low-income families invest less in their children education than other families because they have less money to invest. Financial assistance is the funds allocated to students from low-income families in order to help them get access to education. In other words, financial assistance can provide low-income students with more opportunities in getting quality education and achieve their desired level of education. On the other hands, schools provide educational environment in which capabilities can be converted into
functionings (Fertig, 2012), and schools influence students’ ability to convert their capabilities into educational achievements. Public funds are allocated to schools in order to improve students’ educational environment. In other words, public funds also influence students’ ability to get access to quality education and achieve their desired level of basic educational performance. Therefore, it is critical to examine the funding gaps in financial assistance and public funds.

Next, this study will apply Amartya Sen’s capability approach to explore what the funding gap means to rural and urban students, and why the funding gap needs to be bridged. There are four core ideas in Amartya Sen’s capability approach, functionings, capabilities, freedom, and justice. Functionings are “the various things a person may value doing or being” (Sen, 1999, p. 75). Specifically, in this study functionings can be being admitted to college, dropping out of schools due to not being able to afford educational costs, having the skills of playing piano, studying without adequate food, and so on. Capabilities refer to the freedoms or opportunities that are available to a person to “achieve functionings that he or she has reason to value” (Sen, 1995, p. 5). It refers to the opportunities to access education in this study. Freedom is concerned with the real opportunity that people have to accomplish what they value. In the capability-based assessment of justice, individual claims are not to be assessed in terms of the resources or primary goods the persons respectively hold, but by the freedoms they enjoy to choose the lives that they have reason to value. It is this actual freedom that is “represented by the person’s ‘capacity’ to achieve various alternative combinations of functionings” (Sen, 1995, p. 81). In the capability-based assessment of justice, individual claims are not to be assessed in terms of the information about people’s sense of happiness or desire
fulfillment, but by the freedoms they enjoy to choose the lives that they have reason to value. In this study, educational justice should not be assessed in terms of how great the students’ achievements are, instead, it will be assessed in terms of whether students have equal access to educational resources. In short, Amartya Sen’s capability approach examines equity and social justice based on the capability individuals have in order to enjoy the lives they value. By applying Amartya Sen’s capability approach, I intend to explicate how the funding gap might influence rural students’ opportunities to obtain an education for achieving the lives they have reason to value. In line with Amartya Sen’s capability approach, I will further explore viable reforms to bridge the funding gap between rural and urban schools.

**Significance of the Study**

Agriculture is the foundation of the economy in China, and farmers account for a very large portion (about 50%) of the whole population (National Bureau of Statistics of China, 2012). Based on there population, the problems of agriculture, rural areas, and farmers are the problems of China. The sustained and stable development of China’s economy and society is closely related to the development of agriculture and rural areas. As the subject of industrial structure adjustment, farmers’ skill in science and technology, along with cultural values, impacts their attitudes toward the structure adjustment and their skill levels of the market information selection and application. Rural education plays a fundamental role in building a prosperous and just society in an all-encompassing way.

The present study is ultimately significant for three reasons. First, the present study will provide specific data regarding the funding gaps between rural and urban schools.
Few previous studies present data when illustrating rural problems, however, data is critical because it shows readers how large the gaps are. Second, I apply Amartya Sen’s capability approach in data analysis to analyze the existing problems in rural education. This will hopefully elevate the importance of making more equitable education policies, so that individuals in rural areas could receive equal education and academic achievement as students in urban areas. Third, the data can shed light on how to bridge the funding gaps between rural and urban schools.

**Definition of Terms**

*Rural Area.* The definition of rural area has changed over time. In the beginning of the primitive society, about 1.7 million years ago, the concepts of rural areas and urban areas did not exist. While in about the 21st century B.C. which is the end of the primitive society, the concept of “market” appeared. In the slave society which was from the 21st century B.C. to 476 B.C., the city appeared as the center of the class rule, the industrial production, and the increasingly developing commodity trading market. Because of the rapid development of China’s politics, economy and culture, there was an apparent separation between city areas and farming areas where people were engaged in agriculture and livestock breeding. Therefore, the concept of rural areas as opposed to city or urban areas appeared (Li, 2000; Chen, 2011).

Chen (2011) also analyzed the development of rural areas in China. Before the liberation of China in 1949, rural areas and urban areas were not fully distinct in lieu of Industrial Revolution. After the liberation of the Chinese society, even though the government tried to establish new types of rural areas and urban areas, rural areas existed in the form of countryside, while urban areas existed in the form of middle size and small
cities, because of the disadvantage factors. For example workers did not produce much because of the low level of productive forces. After China stepped into the period of building a well-off society in an all-encompassing way, the coordination of rural and urban development became the characteristic of the Chinese cities and country sides. These characteristic was the integration of urban industries factors and rural production factors. Therefore, the definition of “rural areas” is diachronic and dynamic, and has been vulnerable to changing social and historic conditions.

As for the present state of China, it is difficult to define “rural areas” because of the extremely uneven development of different rural areas. There is a sharp contrast between rural development in the coastal areas in eastern China and in the western regions of China. The rural development of the coastal areas in eastern China has basically been urbanized. The speed of rural development is quite low in western regions, and it is difficulty to judge it’s degree of urbanization. However, the following features could be used when differentiating rural areas and urban areas (Writing group, 1986):

1. Rural areas are less populated than urban areas.

2. In rural areas, most residents are engaged in farming, and farmers account for the majority of the population.

3. The material production of technology, the economic activities, and the commodity economy in rural areas is less developed than that in urban areas. Therefore, a subsistence economy exists to some degree.

4. The material and cultural facilities in rural areas are not as good as those in urban areas; the material and cultural living standards of rural residents are lower than those of urban residents; the communication range of rural residents is
narrower than urban residents; the ancestral concept and the bloodline concept are much more emphasized in rural areas than in urban areas.

Rural areas in this thesis refer to areas where most residents are mainly engaged in agriculture and livestock breeding, and where agricultural production (natural economy and primary industry) is the major task.

*Rural Education*. Li S. (2000), the chairman of the Institute of Chinese Rural Education states that rural education at the primary stage of socialism refers to the education in rural areas, including education in counties. Chen J. (1999), a professor of the College of Education and Science at Nanjing Normal University, indicates that rural education refers to the education which is carried out in rural areas, with the service objects being rural population, serving for the economic and social development of rural areas. It is the general name for all different levels and forms of education provided for rural populations of different ages in rural areas. This includes rural school education (like basic, vocational and higher education) and social education (like community education).

Li C. & Huang Y. (1990), professors of the College of Education at Sichuan Normal University, define rural education in the book of The Economics of Education. They state that rural education refers to the education provided for and in rural areas that directly serve the rural economic and social development, including part of the college and technical secondary school education and training on engineering, agriculture, medicine, teacher education, finance and economics, trading, law and so on.

From the perspectives of these experts and professors, rural education should be defined as education provided for rural populations, and serving the development of rural
areas. Thus, *Rural education* in this thesis refers to the education that is provided for rural population of various ages residing in rural areas, and that serves the economic and social development of rural areas.
CHAPTER II

AMARTY SEN’S CAPABILITY APPROACH

AND EDUCATION EQUITY IN CHINA

In this chapter, I will first review research literature regarding the current situation of rural education in China. Specifically, my review will focus on the existing problems and funding gaps between rural education and urban education. Next, I will examine the key concepts of functionings, capabilities, freedom, and justice within Amarty Sen’s Capability Approach. Finally, I will explore how Amarty Sen’s Capability Approach can explicate what the funding gap means to rural and urban students, and why the funding gap needs to be bridged.

Rural Education Vs. Urban Education in China

As stated in Chapter I, China is an agricultural country, with about half of the whole population living in rural areas, and the “Three Rural Issue” is crucial to the development of China. The development of rural education for farmers and their children are of significance for the realization of educational equity as well as social equity. Farmers account for about 50% of the population in China, the development of rural areas are influential to the development of the country, therefore, to some extent, rural education is decisive to the future of China (Tan, Li & Cao, 2006; Wang, 2007).
First, in comparison with people in urban areas, people who live in rural areas receive less education and endure low-quality education. Yang, Huang & Liu (2014) found that the educational development gap between urban and rural students is very deep because students from rural areas have less opportunity for higher educational achievement. The people who are illiterate accounted for 6.72% of the population in 2000, while 9.5% of the farmer population was illiterate (Feng, 2007). Among the 85 million illiterate people, three-fourths were from western rural areas, minority groups and state poverty-stricken counties (Tan et al., 2006). In China, primary school and middle school net enrollment rates were 99.4% and 99%, respectively, in 2009 (State Council of the people’s Republic of China, 2010; Ministry of Education of the People’s Republic of China, 2010). However, rural children are 3.7 times less likely than urban children to enroll in school (Hong, 2010). In addition, the rate of admission to colleges in rural schools is very low (Liu, 2007). In comparison with China’s 2012 national rate of college admissions of 74.86% (The Ministry of Education of the People’s Republic of China, 2012), Rozelle’s study shows that less than five in one hundred rural primary school students go to university, and the percent continues to decrease (Yuan, 2012). Yu (2012) illustrates that rural students account for merely 23% of all students in 80 universities in Beijing. Both of Yuan (2012) and Yu (2012) believe that the low admission rate and low educational achievements of rural students is primarily due to the low educational quality of rural areas. Yuan (2012) believe that because of the low educational quality, in comparison with urban students, rural students get lower scores in the college entrance examination putting them at a disadvantage.
Second, the funding gaps between rural schools and urban schools persist due to the administrative and fiscal decentralization in China. Education was financed by central and local governments. The budget which is approved by central government involves fiscal redistribution from richer to poorer areas (Knight and Song, 1993; Xu, 2010), while the extra budgetary revenue and expenditure depends on local governments’ capacity to raise revenue can thus lead to spatial inequalities in educational expenditures (Xu, 2010). In particular, the dualistic system of financing education between urban and rural areas provides rural students poor educational opportunities in aspects of quantity and quality. In other words, the local self-reliance policy contributes to regional disparities in education and leaves rural schools in a disadvantage. Consequently, educational rationing is tighter in the rural areas (Knight and Shi, 1996; Xu, 2010) as they have difficulties financing education (Feng, 2007; Cheng, Huang & Guan, 2008). Gao (2003) indicates that local governments are responsible for 87% of the public funds in the free nine-year compulsory education. Consequently, the rural schools receive inadequate funding. In China, the poverty-stricken central’s and western regions’ rural education lags behind that of urban education in terms of infrastructure, instructional quality, and student support (China Bureau of Theoretical Research, 2010; China Institute for Reform and Development, 2008). Liu (2007) demonstrates that rural education is facing problems like educational funding shortage, the unreasonableness of rural school location arrangement (e.g., abolishment or consolidation of small rural schools), poor teaching resources, poor teaching quality, fewer and low qualified teachers in rural schools, and so on. Some rural schools could not even afford chalk (Yuan, 2012). Due to funding shortage, rural schools have poor campuses, decrepit school buildings, arrears of teachers’ salaries, shortage of
multi-media facilities and other electronic equipment (Tan et al., 2006; Zhao & He, 2009; Wang, 2011; Cheng et al., 2008; Ding, 2008). Many rural school buildings are regarded as extremely dangerous and are not safe for students (Zhang, 2008). In 2007, 73.8% of primary schools in urban areas were equipped with proper infrastructure to carry out experimental teaching for science classes, while only 53.1% of primary schools in rural areas had similar equipment (China Institute for Reform and Development, 2008). Furthermore, lots of schools have to lower educational quality because of funding shortage. The educational funding in China accounted for 3.32% of the Gross Domestic Product in 2007, 3.75% in 2009; this percentage is much less than the international standard of 6% (Zhao & He, 2009). Statistical data also shows that of the educational funding in 2002 (580 billion), 77% was used for urban education, while only 23% was used for rural education (Wang, 2007). Wang (2007) states that the unbalanced funding policy results in the huge gap between rural and urban educational quality, which further exacerbates the inequality of educational opportunities.

Third, the gap on teachers’ quality between rural schools and urban schools is broad. As mentioned before, rural teachers have poor living and work conditions, low salary and arrears of teachers’ salaries. Some rural teachers are not satisfied with these problems therefore they have low enthusiasm in working (Wang, 2007). A great number of excellent and qualified teachers choose jobs in urban schools which provide better living and working conditions and higher salaries. This results in an excess of teachers in urban areas, and a shortage of teachers and low qualified teachers in rural areas (Cheng et al., 2008; Chung & Mason, 2012). This current situation of teachers supply seriously constrains the improvement of rural education (Wang, 2007; Zhou, 2012).
In brief, researchers have recently examined the current condition of rural education in China, identified existing problems in rural education, and examined the gaps between rural and urban education. However, they have not fully examined the meaning of the funding gap and the need to bridge this gap between urban and rural schools. In the following section, I will examine the key concepts of functionings, capabilities, freedom, and justice within Amartya Sen’s capability approach. Then, I will apply Amartya Sen’s capability approach to explicate what the funding gap means to rural and urban students, and why the funding gap needs to be bridged.

**Amartya Sen’s Capability Approach**

The capability approach, originally developed within the field of welfare economics, is conceived as a multi-purpose framework. Amartya Sen’s capability approach is a comprehensive normative framework to evaluate and assess the individual well-being and social arrangements, the design of policies, and proposals about social change in society (Robeyns, 2005). This theoretical approach was pioneered by Amartya Sen in his paper entitled “Equality of What?” (Sen, 1980), which assesses well-being from a new perspective. According to Sen (1995), the well-being of a person can be seen in terms of the quality of a person’s being, and must completely depend on the nature of one’s being, or what he referred to as “functionings”. In other words, Sen conceptualizes social justice in terms of equality of opportunities for the individuals to be and to do what they value. Amartya Sen’s capability approach goes beyond a focus on utility and resources, and attaches great emphasis upon individual’s freedom and ability to achieve well-being and to make choices about the lives they have reason to value.
There are four core ideas in the capability approach, functionings, capabilities, freedom, and justice. Functionings are “the various things a person may value doing or being” (Sen, 1999, p. 75), and they are the various states of human beings and activities that people live out. According to Carla & Hoew (2012), the important functionings are being nourished, being employed, having friends, but can also be formulated in more specific terms like being capable of playing football for fun, showing up in public without shame, or being an elite runner even if your body is not aesthetically “perfect.” In the context of formal education in China, the important functionings could be being able to get education even if one cannot afford the books and various fees, focusing on study without being disturbed by hunger, and having a safe environment or campus to grow up and study.

Capabilities refer to the opportunities for choice that are available to a person to “achieve functionings that he or she has reason to value” (Sen, 1995, P. 5). Individuals may be deprived from having capabilities. For example, Ming Li, a boy born in a very low-income rural family in China who loves piano may have very limited opportunities to be a pianist, because his family cannot afford a piano tutor to teach him and rural schools in China do not offer piano class. In line with Sen, Nussbaum (2011, p. 20) points out that Capabilities “are not just abilities residing inside a person but also the freedoms or opportunities created by a combination of personal abilities and the political, social and economic environment”. The Capability Approach conceptualizes the ends of well-being, justice and development in terms of people’s capabilities to function. The Capability Approach entails two core normative claims (Carla & Hoew, 2012). First, the freedom to achieve well-being is of primary moral importance. Second, the freedom to
achieve well-being is to be understood in terms of capabilities, not in terms of basic needs, resources, or preferences satisfaction as in other theories to well-being and quality of life. Alejandra, Jordi & Andres (2012) stated that if one has managed to perform a set of functionings, it is logical to say that this person has faced a couple of possibilities and selected ones that he/she believed to be the most appropriate for his/her wellbeing.

Freedom is also emphasized in the capability approach. To Sen (1995), a person’s position in a social arrangement can be judged in two ways: the actual achievement and the freedom to achieve. Therefore, the capability approach defends that achievements and freedom or opportunities are of equal importance. Achievement is concerned with what people manage to accomplish, while freedom is concerned with the real opportunity that people have to accomplish what they value. Sen (1995) also stated that freedom should be distinguished not only from achievement, but also from resources that help people to achieve freedom. A person’s position in a social arrangement should be evaluated by the extent of freedom, not the means to freedom.

Another important element of the capability approach is justice. The capability approach provides a new paradigm to evaluate individual well-being: the ability to resolve inequality issues, pursue social justice, and promote human rights (Robeyns, 2006). In the capability-based assessment of justice, individual claims are not to be assessed in terms of the resources or primary goods that a person respectively holds and of information about the person’s sense of happiness or desire fulfillment, but by the freedom to choose the life that he/she has reason to value. It is this actual freedom that is “represented by the person’s ‘capacity’ to achieve various alternative combinations of functionings” (Sen, 1995, 81). Sen (1995, 6) characterizes welfarist and utilitarianist
theories that “see value, ultimately, only in individual utility, which is defined in terms of some mental characteristics, such as pleasure, happiness, or desire.” In other words, the utilitarianist theories focus on individual pleasure and happiness, but do not even mention the differences among human beings. He also stated that this is a restrictive approach to taking notice of individual advantage in two distinct ways (Sen 1995, 6). First, it ignores freedom and focuses only on achievements. Second, it ignores achievements other than those reflected in one of these mental metrics, such as pleasure, happiness or desire.

There is also a particularly important contrast between capability-based evaluation and Rawls conception of primary goods, which includes resources such as income, wealth, opportunities, and the social basis of self-respect (Rawls, 1971). Sen (1995, 8) argues that the fundamental diversity of human beings is reason of the contrast. He believes that two persons who hold the same primary goods “can have very different freedoms to pursue their respective conceptions of good,” and to judge equality in the space of primary goods:

amends to giving priority to the means of freedom over any assessment of the extents of freedom, and this can be a drawback in many contexts. The practical importance of the divergence can be very great indeed in dealing with inequalities related to gender, location, and class, and also to general variations in inherited characteristics. (Sen, 1995, pp. 8-9)

In sum, the theoretical framework of Amartya Sen’s capability approach evaluates and assesses the individual well-being and social arrangements, the design of policies, and justice from a new perspective. In the next section, I will explicate how the Capability Approach is related to education and will apply Amartya Sen’s Capability Approach to explicate what the funding gap means to rural and urban students, and why the funding gap needs to be bridged.
Amartya Sen’s Capability Approach and Education

The Amartya Sen’s capability approach is an approach to measuring well-being, and it has since been developed and applied in multiple fields including education. Sen regards education as one of ‘a relatively small number of centrally important beings and doings that are crucial to well-being’ (cited in Walker & Underhalter, 2007, pp. 7-8). In other words, education is considered as a basic capability. Sen (2003) also states that: “the ability to exercise freedom may, to a considerable extent, be directly dependent on the education we have received, and thus the development of the educational sector may have foundational connections with the capability-based approach” (p. 12). Education is seen has an enabling process, which provides individuals with opportunities to get access to experiences which can help them develop functionings (Michael F., 2012). In short, being equally educated is a basic need of human beings, and one’s educational level may affect the promotion and expansion of one’s freedoms, or capabilities. Therefore, being deprived of equitable education during childhood, both in terms of formal schooling and of informal learning in social interactions, may cause disadvantage that is difficult to compensate for later in life (Lorella T., 2007). For instance, consider an example that children learn mathematics. Learning mathematics could expand students’ capacities, like time management. It also provides them with career opportunities and the autonomy of choosing their way of life, like being mathematician, physicist, and computer programmer. As a capability obtained through education extend individuals’ career choices, it also extends the levels of individuals’ social and political participation. Learning mathematics may promote individuals’ civic participation in different forms.
Therefore, education plays a significant role in expanding capabilities and in determining individuals’ opportunities for well-being.

As mentioned before, education is of importance for people’s wellbeing and the promotion of the achieved functionings. Sen (1992) states that seeking equality in capabilities is equivalent to the appropriate enactment of the equal consideration due to individuals. In other words, inequality in educational capabilities may cause inequality in freedom that develops effective functionings. In addition, education has great influence on individuals’ future. It may affect people’s choices on their careers and the lives they may have in the future. Consequently, inequality in educational capabilities may also cause individuals with unequal education to be disadvantaged in their future life, effecting their well-being. Therefore, equal opportunities, such as receiving at least compulsory education, studying on equally well-equipped campus, being offered with same courses, should be secured for the equal educational functionings of all people.

In conclusion, capabilities can be considered the opportunity students have to enjoy the lives they have reason to value. The capability approach indicates a conception of educational equality that requires equal opportunities to the achievement of fundamental functionings which are developed by education (Terzi, 2007). The capability approach suggests that students “should have the same extent of opportunities to achieve fundamental functionings, like being able to read and to write, or to concentrate and accomplish tasks, or to reflect critically on one’s own actions” (Terzi, 2007, p. 762). According to Terzi (2007), the opportunities here “include; educational resources, both in terms of physical resources and human resources; settings, like school buildings and
facilities; and external conditions, like policies and regulations that are necessary to promote educational achievement” (p. 762)

From the opportunities Terzi provided, we could see that the opportunities within the concept of the capability approach highlight equal access to the achievement, instead of actual achievement. For example, individuals should have equal opportunities to achieve functionings like reading, writing and reasoning. Consider, for instance, Li Ming and Wang Lei, who have achieved different outcomes on Technology education. Li Ming has high programming level, whereas Wang Lei has achieved basic computer functionings. Suppose that Li Ming and Wang Lei have different achieved functionings due to the fact that Li Ming’s school could provide computers courses aimed at improving levels of achievement, while Wang Lei’s schools could not provide computer courses because the school could not afford the expenses of computers. The different outcomes in this example are related to a substantial inequality in the spaces of capabilities. The capability approach places great importance to the equality as equal opportunities for functionings. What is highlighted in the space of equality of capabilities refers to the equal opportunity that individuals have to acquire educational functionings. Drawing on these considerations, in order to realize equal education, we should provide all students with equal access to educational functionings.
CHAPTER III
THE FUNDING GAP BETWEEN URBAN AND RURAL SCHOOLS:
FINANCIAL ASSISTANCE

In this chapter, I will first introduce the CEFSY. Then, I undertake an inquiry into the funding gap between urban schools and rural schools in Shanghai from 2004 to 2011. I will further explore how Amarty Sen’s Capability can explicate what the funding gap on financial assistance means to rural and urban students, and why it is critical to bridge the funding gap.

China Educational Finance Statistical Yearbooks

The CEFSY are co-written by the Finance Division of the Ministry of Education of the People’s Republic of China, and the Social Science and Technology and Cultural Industries Statistics Division of the National Bureau of Statistics of the People’s Republic of China. The CEFSY provides important funding allocation data for the educational policy-making at both national level and local levels. The CEFSY collects data from nine-year compulsory schools established by different levels of governments, state-owned holding enterprises, and social organizations and individuals. The CEFSY provides valuable data for studying the educational funding structure in China. It promotes the informational exchange among different regions and the education financial
management levels. All financial data in the CEFSY was collected from the schools, and then gathered by towns, counties, cities, and provinces according to the priority. Educational departments and statistics departments of all levels carefully organize the data and prepare the financial statements to compile China education financial data and to insure accuracy, timeliness, and completeness of the data. Due to the difficulty of collecting massive data and the heavy workload that the China education financial statistical work involves, the two departments were aware of potential procedural errors in the process of data collection, data compiling, and data processing.

CEFSY includes data regarding education expenditures at all levels including teachers’ salary and benefits, financial assistance to students from low-income families (waiving low-income students’ miscellaneous fees, expenditures for textbooks and excise books, and providing them with cash), public funds (including instructional materials expenses, utility fee, water, electricity, heating expenses, transportation costs, official traveling expenses, printing fee, vehicles purchase costs, office equipment purchase costs, special equipment purchase costs, books and data purchase costs, business entertainment expenses, training expenses, teaching facilities expenses, and maintenance expenses), and capital construction funds (fixed assets, intangible assets, and land). The current study focuses on the overall financial assistance funds, the overall public funds, the average financial assistance funds per student, and the average public funds per student at the level of Shanghai municipality.

The Funding Gap between Urban and Rural Schools in Financial Assistance

In this study, I extract data from the CEFSY to show the funding gap between urban and rural schools in financial assistance. Specifically, I extract data of total funds
for financial assistance of primary education in urban schools, total funds for financial assistance of primary education in rural schools, total funds for financial assistance of junior secondary education in urban schools, total funds for financial assistance of junior secondary education in rural schools, the average financial assistance funds per student of primary education in urban schools, the average financial assistance funds per student of primary education in rural schools, the average financial assistance funds per student of junior secondary education in urban schools, and the average financial assistance funds per student of junior secondary education in rural schools, respectively. Table 1 summarizes total financial assistance funds of primary education by urban and rural schools and the percentage of the funding gap between urban and rural schools between 2004 and 2011. Table 2 summarizes total financial assistance funds of junior secondary education by urban and rural schools and the percentage of the funding gap between urban and rural schools between 2004 and 2011. Table 3 summarizes average financial assistance funds per student of primary education by urban and rural schools and the percentage of the funding gap between urban and rural schools between 2004 and 2011. Table 4 summarizes average financial assistance funds per student of junior secondary education by urban and rural schools and the percentage of the funding gap between urban and rural schools between 2004 and 2011.

Based on the data collected in the CEFSY, the total funds for financial assistance of primary education in both urban schools and rural schools consistently increased from 2004 to 2011 (see Table 1). Generally, the total funds in both urban and rural schools consistently increased. The total fund in urban primary schools in 2011 is about twenty five times as much as it was in 2004, and the total fund in rural primary schools in 2011
is seventy times as much as it was in 2004. The total funds for financial assistance of junior secondary education in both urban schools and rural schools increased from 2004 to 2011 (see Table 2). The total fund in urban junior secondary schools in 2011 is about eight times as much as it was in 2004, and the total fund in rural junior secondary schools in 2011 is thirty times as much as it was in 2004.

Based on the data collected in the CEFSY, Table 1 also demonstrates the difference of the percentage on total financial assistance funds between rural primary schools and urban primary schools. It shows that the trend dramatically decreased, from 75.54% in 2004 to 39.93% in 2011. The trend of the difference of the percentage on total financial assistance funds between rural junior secondary schools and urban junior secondary schools decreased from 89.45% to 61.20% (see Table 2). However, there was a small increase in the year of 2011. In comparison with primary schools, the gap of the percentage on total financial assistance funds between rural schools and urban schools in junior secondary education is much larger. In accordance with the CEFSY, the differences on total financial assistance between rural and urban schools decreased sharply in recent years, especial for primary schools. Based on the data, more funds and the narrowed gap meant that more resources are allocated to rural schools to equalize the resources allocation between rural schools and urban schools. However, things could be different if we read Table 3 and Table 4. Based on the data collected in the CEFSY, the average financial assistance funds per student of primary education in both urban schools and rural schools consistently increased from 2004 to 2011 (see Table 3). Both the average fund per student in urban primary schools and rural primary schools doubled in the eight years. The average financial assistance funds per student of junior secondary education in
both urban schools and rural schools increased from 2004 to 2011. Both the average fund in urban junior secondary schools and rural junior secondary schools almost tripled in the eight years. According to Table 3, the trend of the difference of the percentage on average financial assistance funds between rural primary schools and urban primary schools decreased from 12.23% to 4.30% from 2004 to 2007, while it significantly increased to 20.96% in 2011. Generally, the trend of the gap of the percentage on average financial assistance funds between rural junior secondary schools and urban junior secondary schools kept consistent from 2004 to 2011, with the difference of 17.60% in 2011 (see Table 4). The gap of the percentage on average financial assistance funds between rural schools and urban schools in primary education began to exceed the gap in junior secondary education in the year of 2010. Even though the gap in percentage on average financial assistance funds between rural schools and urban schools in primary education is smaller than that of junior secondary education, the gap of the percentage on average financial assistance funds between rural schools and urban schools in primary education is larger than that of junior secondary education. The differences are quite significant (see Table 1, 2, 3 & 4).

From Tables 1, 2, 3 & 4, we could tell that even though the differences on financial assistance between rural and urban schools in compulsory education decreased sharply in recent years, the difference of the percentage of average financial assistance funds per student between rural junior secondary schools and urban junior secondary schools persisted. The difference of the percentage on average financial assistance funds per student between rural primary schools and urban primary schools almost doubled.
#### Table 1

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
<th>Rural less than Urban(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004 Total financial assistance</td>
<td>4832</td>
<td>1182</td>
<td>75.54%</td>
</tr>
<tr>
<td>2005 Total financial assistance</td>
<td>14304</td>
<td>4104</td>
<td>71.31%</td>
</tr>
<tr>
<td>2006 Total financial assistance</td>
<td>20040</td>
<td>8033</td>
<td>59.92%</td>
</tr>
<tr>
<td>2007 Total financial assistance</td>
<td>23301</td>
<td>6183</td>
<td>73.46%</td>
</tr>
<tr>
<td>2008 Total financial assistance</td>
<td>135171</td>
<td>57479</td>
<td>57.48%</td>
</tr>
<tr>
<td>2009 Total financial assistance</td>
<td>123026</td>
<td>58256</td>
<td>52.65%</td>
</tr>
<tr>
<td>2010 Total financial assistance</td>
<td>131747</td>
<td>75991</td>
<td>42.32%</td>
</tr>
<tr>
<td>2011 Total financial assistance</td>
<td>137263</td>
<td>82459</td>
<td>39.93%</td>
</tr>
</tbody>
</table>

Values are in Chinese Yuan.
Unit: Thousand Chinese Yuan.

#### Table 2

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
<th>Rural less than Urban(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004 Total financial assistance</td>
<td>16640</td>
<td>1755</td>
<td>89.45%</td>
</tr>
<tr>
<td>2005 Total financial assistance</td>
<td>25767</td>
<td>4532</td>
<td>82.41%</td>
</tr>
<tr>
<td>2006 Total financial assistance</td>
<td>31256</td>
<td>7433</td>
<td>76.22%</td>
</tr>
<tr>
<td>2007 Total financial assistance</td>
<td>34813</td>
<td>8142</td>
<td>76.61%</td>
</tr>
<tr>
<td>2008 Total financial assistance</td>
<td>143615</td>
<td>45424</td>
<td>68.37%</td>
</tr>
<tr>
<td>2009 Total financial assistance</td>
<td>126806</td>
<td>45588</td>
<td>64.05%</td>
</tr>
<tr>
<td>2010 Total financial assistance</td>
<td>136547</td>
<td>59087</td>
<td>56.73%</td>
</tr>
<tr>
<td>2011 Total financial assistance</td>
<td>128995</td>
<td>50056</td>
<td>61.20%</td>
</tr>
</tbody>
</table>

Values are in Chinese Yuan.
Unit: Thousand Chinese Yuan.
Table 3

Average Financial Assistance Funds per Student of Primary Education by Urban and Rural Schools (2004-2011)

<table>
<thead>
<tr>
<th>Year</th>
<th>Urban</th>
<th>Rural</th>
<th>Rural less than Urban(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>5902.81</td>
<td>5181.19</td>
<td>12.23%</td>
</tr>
<tr>
<td>2005</td>
<td>6950.05</td>
<td>6469.37</td>
<td>6.92%</td>
</tr>
<tr>
<td>2006</td>
<td>8058.84</td>
<td>7255.06</td>
<td>9.97%</td>
</tr>
<tr>
<td>2007</td>
<td>9372.1</td>
<td>8969.56</td>
<td>4.30%</td>
</tr>
<tr>
<td>2008</td>
<td>10896.23</td>
<td>9779.83</td>
<td>10.25%</td>
</tr>
<tr>
<td>2009</td>
<td>12755.59</td>
<td>10912.63</td>
<td>14.45%</td>
</tr>
<tr>
<td>2010</td>
<td>13444.47</td>
<td>10772.85</td>
<td>19.87%</td>
</tr>
<tr>
<td>2011</td>
<td>13663.59</td>
<td>10799.63</td>
<td>20.96%</td>
</tr>
</tbody>
</table>

Values are in Chinese Yuan.

Table 4

Average Financial Assistance Funds per Student of Junior Secondary Education by Urban and Rural Schools (2004-2011)

<table>
<thead>
<tr>
<th>Year</th>
<th>Urban</th>
<th>Rural</th>
<th>Rural less than Urban(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>6236.28</td>
<td>5212.38</td>
<td>16.42%</td>
</tr>
<tr>
<td>2005</td>
<td>8065.14</td>
<td>6513.42</td>
<td>19.24%</td>
</tr>
<tr>
<td>2006</td>
<td>9539.8</td>
<td>7927.58</td>
<td>16.90%</td>
</tr>
<tr>
<td>2007</td>
<td>11590.23</td>
<td>9582.29</td>
<td>17.32%</td>
</tr>
<tr>
<td>2008</td>
<td>13326.44</td>
<td>11487.38</td>
<td>13.80%</td>
</tr>
<tr>
<td>2009</td>
<td>15994.52</td>
<td>13226.28</td>
<td>17.31%</td>
</tr>
<tr>
<td>2010</td>
<td>16653.04</td>
<td>13336.3</td>
<td>9.92%</td>
</tr>
<tr>
<td>2011</td>
<td>17118.31</td>
<td>14104.73</td>
<td>17.60%</td>
</tr>
</tbody>
</table>

Values are in Chinese Yuan.
Applying Sen’s Capability Approach to Analyze the Funding Gap on Financial Assistance

Sen’s capability approach aims to offer equal access to educational resources in order to facilitate the development of all students’ capabilities (Klasen, 2010). The importance of the promotion of equality in education is apparent, and Sen’s capability approach provides an effective assessment for the level of equality and identifying areas that need to be changed (Cameron, 2012). Functionings are “the various things a person may value doing or being” (Sen, 1999, p. 75), and they are the various states of human beings and activities that people live out. In other words, functionings refer to what people can achieve, like being nourished, being capable of playing basketball for fun, having job and so on. In line with Sen’s capability approach, Terzi (2007) explicates equality by indicating that equality does not mean the equality in achieved functionings, instead, it refers to the equal opportunities that people have to develop educational functionings. From the standpoint of Sen’s capability approach, the pursuit of equality in education does not require equal outcomes. Instead, education should promote equal opportunity to achieve fundamental functionings, like being able to read, count and so on, that are required for equal participation in society (Terzi, 2007). If the provision of basic educational capabilities is unequal, this in turn will lead to unequal freedom by individuals to function effectively in society (Terzi, 2007). For instance, if some school does not provide musical instruments course due to limited finances, students in this school have less opportunities to develop their musical potential. Consequently, they do not have equal freedom to develop their musical functionings in society.
Education is of importance because it facilitates human beings’ development of capabilities and affects the expansion of human freedom (Sen, 1999). Therefore, education should provide individuals with adequate educational opportunities so they can develop their capabilities and increase their freedom. Tikly and Barrett (2011) stated that “key role for a good quality education becomes one of supporting the development of autonomy and the ability to make choices in later life”. However, for some students having equal access to these basic capabilities is a challenge. Chen (2006) points out that poverty is a “multidimensional phenomenon; it is not only a matter of low income but also a set of relationships in which factors such as health, education, and nutrition interact (p. 21).” To Chen, poverty not only manifests itself in the form of low income but also in the form of less education. Yao (2000) stated that poverty is predominantly a rural phenomenon in China. Rural students are more likely to suffer from lack of educational functionings and limited freedom caused by economic disadvantage. As mentioned before, students are exempted from paying tuition fees during compulsory education. In addition to tuition, the education costs include the costs of books, extracurricular courses, school boarding, uniforms and so on. Consequently, the free nine-year compulsory education has not fundamentally solved the educational cost problems in China. Students still need to pay for textbooks, boarding costs, and other informal fees. It is noted that many students from low-income families in rural areas do not have textbooks, have less access to extracurricular books and remedial classes because their parents cannot afford them. Educational Statistical Yearbook of China (2007) shows that the number of books per student in rural schools is about one third less than the number of books per students in urban schools. Rural students may be reading textbooks when their urban counterparts
are reading extracurricular books; rural students may be helping their parents do housework when their urban counterparts are taking tutorial lessons to improve their exam scores. Rural students are at a disadvantage from the starting line. To some extent, there has been a correlation between students’ educational achievement and their family income. Due to inadequate funding, rural schools actually ask students to pay for internet, warm water, exam and heating fees (Kipnis & Li, 2010). In Zhang’s research (2014), among the poorest households, about 67% of children were still in school or had completed compulsory education, while 96% of children from the richest households were still in school or had completed compulsory education. In other words, children from low-income families had higher tendency to drop out of school. As a result, students in rural schools are less likely to achieve effective educational functionings as their urban counterparts may achieve.

According to Reimers (2000), students from low-income rural families have less material commodities to support their health and well-being, and their parents have less ability to prepare them for school. China has experienced a widening income gap between urban and rural areas, and rural poverty was more prevalent than urban poverty (Yu, 2013). According to Yu & Hannum (2007), home nutrition environment, which is measured as a scale of food variety, was related to household socioeconomic status and children’s school performance. Home nutrition environment also functioned as an important mediator of poverty effects on education for children in early primary grades. Hunnum, Liu & Frongillo (2014) also found that poverty resulted in poor nutrition and food insecurity. In other words, children from poor households are at greater risk for nutritional deprivation and food insecurity. They also stated that height-for-age and food
insecurity were both greatly related to literacy scores, children with greater food insecurity severity have lower literacy scores. Consequently, in comparison with urban students, rural students are more likely to have poor educational achievements due to the poor health and well-being. In addition, students from low-income families are liable to be distracted from study since they have many things to worry about, like food and school supplies. I knew a girl from rural low-income family when I worked for a University in China. Being unable to afford food, she had one meal in the evening everyday. She suffered hunger everyday and had to drink a lot of water to relieve her hunger. It was impossible for her to concentrate on study since she suffered hunger everyday. One of her teachers noticed her condition and helped her find a part-time job, and she also got financial assistance from the university after the leaders were informed of her condition. She became outgoing and talkative after she got financial support. If students go to school in hunger, it is impossible for them to concentrate on study, or get high scores on exams. In addition, Chinese students always have large quantities of homework, and they usually spend a lot of time afterschool studying in order to get higher scores in examinations. However, parents of low-income families are often busy working to earn more money and do not have time to tutor their children with homework and do not have money for a tutor. Additionally, children from low-income families also have to do a lot of housework since their parents do not have time to do it. Unterhalter (2003b) provides an example of educational capability formation through a method of cross-referencing aspects of education with the evaluative aspects of capabilities. According to Unterhalter, being able to concentrate in class (not to be hungry, tired, or anxious) is one of the conditions that may affect individual’s well-being freedom. In other
words, not being able to concentrate in class influences students’ effectiveness in study and develop educational functionings.

As mentioned before, in comparison with students in urban schools, students in rural schools come from economically disadvantaged families. The financial gap disadvantages rural students. In comparison with urban students, rural students have less quality education. It is known by most Chinese that rural students are always lagging behind in educational achievements. The disparity of access to the higher level education between urban areas and rural areas is significant. The ratio of higher level education attendance is much higher in urban areas than in the rural areas. According to Xu (2010), 156,981 children enrolled in primary schools in the rural areas of China, 8.5% of them finished high school, while 61% of their counterparts in urban areas finished high school. In addition, rural students have less access to higher education than urban students do. According to Educational Statistical Yearbooks of China (2004), only 4.5% of 2,000 students admitted to Beijing University came from rural areas in 2004. The disparity in access to higher education also causes disparity of employment rate between rural students and urban students. Hong (2004) stated the employment rate for famous universities is higher than that for ordinary universities, and the rate of employment for graduates of colleges and universities directly under the Ministry of Education is 20% higher than the rate of employment for graduates of colleges and universities under local governments. To some extent, we can say that the low rate of admission to colleges for rural students is relative to their family’s income level.

In accordance with Sen’s capability approach, the pursuit of educational equality should focus on providing students with adequate educational opportunities to develop
the levels of functionings that are necessary to achieve the lives they have reason to value. Students from low-income families have the right to achieve educational functionings. As mentioned above, low-income students who are granted with financial assistance have their miscellaneous fees waived and they do not need to pay for textbooks and workbook. With financial assistance, rural low-income students may have more opportunities, such as material commodities to support their health and well-being, more access to different kinds of books, more time to study instead of doing housework, the ability to afford computer to get more information from the internet, greater possibility to be admitted into universities, and so on. In other words, they may have better opportunities to prepare themselves for school. Providing financial assistance does not mean providing more knowledge to students. However, it facilitates low-income students’ study and enables them to achieve effective educational functionings. Therefore, students from low-income rural schools should receive more opportunities and resources to obtain an equivalent level of functionings as their counterparts in urban schools. In the context of China, the basic capabilities should include capabilities like being able to read and write, being able to calculate, being able to read English and communicate with basic English knowledge. These capabilities are important because Language Arts, Math and English are significant for students taking college entrance exams to access higher education, and communicating and counting are essential to one’s life. Low-income students are entitled to acquire these fundamental capabilities. This means that the students from low-income families in both urban areas and rural areas should be offered adequate resources and opportunities, such as being provided with textbooks and workbooks. Securing fundamental educational functionings means exactly providing the exact resources and
opportunities that are necessary for students from low-income families to achieve the life they have reason to value.

Financial assistance provides the low-income students with opportunities to have access to education, therefore, to increase their capabilities and develop their functionings. The functionings they developed through education are essential to secure their future capabilities which should be achieved by all children, including children from low-income families. Sen (2000) indicates that lack of education could constitute fundamental disadvantages for human beings. He states that deprivation of education during childhood causes disadvantage to compensate for later in life. Klasen (2010) argues that education is instrumental in developing freedom as the children get older. Both Sen (2000) and Klasen (2010) emphasize the significance of the freedom children will have in the future, instead of the freedom they have now. For instance, consider an example that children learn mathematics. Learning mathematics could expand students’ capacities, like problem solving. It also provides them with career opportunities like being mathematician, physicist, a computer programmer and so on. As the capability obtained through education extend individuals’ career choices, it also extends the levels of individuals’ social and political participation. Learning mathematics may promote individuals’ civic participation in different forms. Therefore, education plays a significant role in expanding capabilities and in determining individuals’ opportunities for well-being (Lorella, 2007), and rural students should have the same opportunities to achieve educational functionings as their urban counterparts do.

However, from Tables 1&2, Figures 1&2, we can see that there are huge gaps on both the overall financial assistance and the average financial assistance between rural
and urban schools, and the gap in the percentage on average financial assistance between rural schools and urban schools has increased dramatically. In other words, the resource allocation shown in Tables 1 & 2 and Figures 1 & 2 reflects the unequal realities of disproportionate opportunities for personal autonomy between rural students and urban students within compulsory education in Shanghai. This indicates that rural students do not have equal freedom and opportunities to achieve the educational functionings as urban students do. To ensure that students in rural schools can develop their capabilities in order to live the lives they have a reason to value, provision of more resources and funding should be allocated to rural schools and students, and the average financial assistance should be increased for rural students. In addition to waiving their miscellaneous fees, expenditures for textbooks and excise books, low-income rural students should get more financial assistance in order to ensure the equal education.

In conclusion, the pursuit of equity in education must focus on bridging the funding gap in the area of financial assistance between urban and rural students. Providing rural students with adequate financial assistance is essential for rural students to achieve equal and effective educational functionings.
CHAPTER IV

THE FUNDING GAP BETWEEN URBAN AND RURAL SCHOOLS:

PUBLIC FUNDS

In this chapter, I will undertake an inquiry into the gap in public funds between rural and urban students. I will also apply Sen’s capability approach to argue for the need to bridge the funding gap between urban and rural students.

The Funding Gap between Urban and Rural Schools in Public Funds

This study extracts data from the CEFSY to show the funding gap between urban and rural schools. Specifically, data from total public funds of primary education in urban and rural schools, total public funds of junior secondary education in urban and rural schools, the average public funds per student of primary education in urban and rural schools, and the average public funds per student of junior secondary education in urban and rural schools, were extracted respectively. Table 5 summarizes total public funds of primary education by urban and rural schools and the percentage of the funding gap between urban and rural schools between 2004 and 2011. Table 6 summarizes total public funds of junior secondary education by urban and rural schools and the percentage of the funding gap between urban and rural schools between 2004 and 2011. Table 7 summarizes average public funds per student of primary education by urban and rural schools and the percentage of the funding gap between urban and rural schools between
2004 and 2011. Table 8 summarizes average public funds per student of junior secondary education by urban and rural schools and the percentage of the funding gap between urban and rural schools between 2004 and 2011.

Based on the data collected in the CEFSY, the public funds of primary education in both urban schools and rural schools consistently increased from 2004 to 2011 (see Table 5). There was a large increase in both urban schools and rural schools in the year of 2011. The funds in urban primary schools in 2011 is more than two times as much as it was in 2004, and funds in rural primary schools in 2011 is more than three times as much as it was in 2004. The public funds of junior secondary education in both urban schools and rural schools consistently increased from 2004 to 2011 as well (see Table 6). There was a large increase in both urban schools and rural schools in the year of 2011. The funds in urban junior secondary schools in 2011 is less than two times as much as it was in 2004, and funds in rural junior secondary schools in 2011 is three times as much as it was in 2004. Even though rural schools got more funding in 2011 than they did in 2004, there is still a large funding gap between rural schools and urban schools. As shown in Table 5, the trend of the difference of the percentage on public funds between rural primary schools and urban primary schools decreased from 78.63% in 2004 to 72.04% in 2011. The difference of the percentage of public funds between rural junior secondary schools and urban junior secondary schools dramatically decreased from 82.67% in 2004 to 66.70% in 2011 (see Table 6).

In comparison with primary schools, the gap of the percentage on public funds between rural schools and urban schools in junior secondary education has largely narrowed. However, the public funding gaps in both primary education and secondary
Table 5

Total Public Funds of Primary Education by Urban and Rural Schools (2004-2011)

<table>
<thead>
<tr>
<th>Urban(%)</th>
<th>Urban</th>
<th>Rural</th>
<th>Rural less than</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
<td>Rural less than</td>
</tr>
<tr>
<td>2004 Public funds</td>
<td>1456970</td>
<td>311285</td>
<td>78.63%</td>
</tr>
<tr>
<td>2005 Public funds</td>
<td>1176648</td>
<td>343938</td>
<td>70.77%</td>
</tr>
<tr>
<td>2006 Public funds</td>
<td>1476083</td>
<td>443229</td>
<td>69.97%</td>
</tr>
<tr>
<td>2007 Public funds</td>
<td>1640228</td>
<td>498674</td>
<td>69.60%</td>
</tr>
<tr>
<td>2008 Public funds</td>
<td>2223761</td>
<td>661824</td>
<td>70.24%</td>
</tr>
<tr>
<td>2009 Public funds</td>
<td>2363912</td>
<td>669500</td>
<td>71.68%</td>
</tr>
<tr>
<td>2010 Public funds</td>
<td>2902590</td>
<td>871879</td>
<td>69.96%</td>
</tr>
<tr>
<td>2011 Public funds</td>
<td>4102695</td>
<td>1147877</td>
<td>72.02%</td>
</tr>
</tbody>
</table>

Values are in Chinese Yuan.
Unit: Thousand Chinese Yuan.

Table 6

Total Public Funds of Junior Secondary Education by Urban and Rural Schools (2004-2011)

<table>
<thead>
<tr>
<th>Urban(%)</th>
<th>Urban</th>
<th>Rural</th>
<th>Rural less than</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
<td>Rural less than</td>
</tr>
<tr>
<td>2004 Public funds</td>
<td>1663319</td>
<td>288316</td>
<td>82.67%</td>
</tr>
<tr>
<td>2005 Public funds</td>
<td>1647992</td>
<td>366196</td>
<td>77.78%</td>
</tr>
<tr>
<td>2006 Public funds</td>
<td>1592785</td>
<td>424001</td>
<td>73.38%</td>
</tr>
<tr>
<td>2007 Public funds</td>
<td>1676538</td>
<td>522280</td>
<td>68.85%</td>
</tr>
<tr>
<td>2008 Public funds</td>
<td>1769681</td>
<td>603356</td>
<td>65.91%</td>
</tr>
<tr>
<td>2009 Public funds</td>
<td>1879045</td>
<td>620437</td>
<td>66.98%</td>
</tr>
<tr>
<td>2010 Public funds</td>
<td>2113676</td>
<td>682766</td>
<td>67.70%</td>
</tr>
<tr>
<td>2011 Public funds</td>
<td>2643594</td>
<td>880555</td>
<td>66.70%</td>
</tr>
</tbody>
</table>

Values are in Chinese Yuan.
Unit: Thousand Chinese Yuan.
Table 7
Average Public Funds per Student of Primary Education by Urban and Rural Schools (2004-2011)

<table>
<thead>
<tr>
<th>Year</th>
<th>Urban</th>
<th>Rural</th>
<th>Rural less than Urban(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>5393.68</td>
<td>1493.84</td>
<td>72.30%</td>
</tr>
<tr>
<td>2005</td>
<td>4327.16</td>
<td>1753.22</td>
<td>59.48%</td>
</tr>
<tr>
<td>2006</td>
<td>5498.99</td>
<td>2305.63</td>
<td>58.07%</td>
</tr>
<tr>
<td>2007</td>
<td>5687.09</td>
<td>2942.61</td>
<td>48.26%</td>
</tr>
<tr>
<td>2008</td>
<td>7155.84</td>
<td>3542.98</td>
<td>50.49%</td>
</tr>
<tr>
<td>2009</td>
<td>7730.53</td>
<td>3179.99</td>
<td>58.86%</td>
</tr>
<tr>
<td>2010</td>
<td>9297.52</td>
<td>3669.4</td>
<td>60.53%</td>
</tr>
<tr>
<td>2011</td>
<td>12868.28</td>
<td>4321.68</td>
<td>66.42%</td>
</tr>
</tbody>
</table>

Values are in Chinese Yuan.

Table 8
Average Public Funds per Student of Junior Secondary Education by Urban and Rural Schools (2004-2011)

<table>
<thead>
<tr>
<th>Year</th>
<th>Urban</th>
<th>Rural</th>
<th>Rural less than Urban(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>5653.4</td>
<td>2119.8</td>
<td>62.50%</td>
</tr>
<tr>
<td>2005</td>
<td>5927.44</td>
<td>2848.42</td>
<td>51.95%</td>
</tr>
<tr>
<td>2006</td>
<td>6040.14</td>
<td>3471.86</td>
<td>42.52%</td>
</tr>
<tr>
<td>2007</td>
<td>5100.59</td>
<td>4533.91</td>
<td>11.11%</td>
</tr>
<tr>
<td>2008</td>
<td>6384.3</td>
<td>5208.5</td>
<td>18.42%</td>
</tr>
<tr>
<td>2009</td>
<td>7870.37</td>
<td>4747.43</td>
<td>39.68%</td>
</tr>
<tr>
<td>2010</td>
<td>8596.11</td>
<td>5476.35</td>
<td>36.29%</td>
</tr>
<tr>
<td>2011</td>
<td>10961.42</td>
<td>6467.12</td>
<td>41.00%</td>
</tr>
</tbody>
</table>

Values are in Chinese Yuan.
junior education remain significant, with urban schools getting more funding than rural schools. According to the data collected in the CEFSY, it is apparent that the average public fund per student in urban primary schools doubled in the eight years, and the average public fund per student in rural primary schools almost tripled in the eight years (see Table 7). The average public funds per student of junior secondary education in both urban schools and rural schools increased from 2004 to 2011 as well, with the average public funds in urban schools doubled and the fund in rural schools tripled (see Table 8). According to Table 7, the difference of the percentage on average public funds per student between rural primary schools and urban primary schools decreased from 72.30% in 2004 to 48.26% in 2007, and the decrease in 2007 was quite notable. It then increased to 66.42% in the year of 2011. The gap of the percentage on average public funds between rural junior secondary schools and urban junior secondary schools dramatically decreased from 62.50% in 2004 to 11.11% in 2007, then, it increased to 41.00% in 2011, and there was a significant increase in the year of 2009 (see Table 8). Generally, the average public funds of primary education in both urban schools and rural schools consistently increased from 2004 to 2011, with a large increase in the year of 2011, however, the differences of the average public funds between urban and rural schools from 2004 to 2011 were remained quite significant.

In general, the gaps in the percentage on both total public funds and average public funds between rural schools and urban schools in both primary education and junior secondary education decreased from 2004 to 2011. Even thought the gaps were narrowed down generally, the differences were still quite significant (see Tables 1, 2, 3 & 4).
Applying Sen’s Capability Approach to Analyze the Funding Gap on Public funds

Schools are organizations that aim to provide the youth with an educational environment in which capabilities can be converted into functionings (Fertig, 2012). Tao (2009) undertook a very incisive study in her investigation of the relationship between Sen’s capability approach and school improvement interventions in Tanzania. Tao (2009) stated that “The parallel (is) that schools can be contexts for inequality – much like the poverty-stricken village – but instead the teachers and pupils are its deprived residents.” (p. 5). Schools can be considered social contexts which have an impact upon students’ ability to convert their capabilities into functionings. Therefore, schools are of critical importance to students’ educational functionings. Sen (1999) argued the central importance of environmental factors:

What people can positively achieve is influenced by economic opportunities, political liberties, social powers, and the enabling conditions of good health, basic education, and the encouragement and cultivation of initiatives. The institutional arrangements for these opportunities are also influenced by the exercise of people’s freedoms, through the liberty to participate in social choice and in the making of public decisions that impel the progress of these opportunities. (Sen, 1999, p.5)

Tao (2009) also examined the relationship between individuals and environment in her study. She presented a framework that includes three “conversion factors” that influence individuals’ ability to convert capabilities into functionings that they have reason to value. The three factors are the personal factor, the environmental factor and the social factor. Tao (2009) argues that “The simple presence of an input will not guarantee its use. Thus, the conversion factors affecting it need to be arranged so that capabilities are expanded” (p. 8). In other words, exterior environment is crucial for individuals to acquire capabilities and achieve educational functionings. According to Tao’s survey (2009), fear
of teacher (the personal factor), far distance to walk to school (the environmental factor), and other students missing class (the social factor) may be the reasons for students’ irregular attendance. After missing too many classes, they may feel like they have fallen so far behind that there’s no reason to continue. This will affect students’ freedom or opportunity to come to class, furthermore, this will negatively affect them to achieve their educational functionings.

As mentioned in Chapter 3, public funds include instructional materials expenses, utility fees like water and electricity, heating expenses, transportation costs, official traveling expenses, printing fee, vehicles purchase costs, office equipment purchase costs, special equipment purchase costs, books and data purchase costs, business entertainment expenses, training expenses, teaching facilities expenses, and maintenance expenses. The differences in public funds between rural and urban schools result in differences in the resources that are available to schools and in differences in the quality of teachers (Reimers, 2000). Xu (2010) indicated that rural children usually grow up in low-income neighborhoods and they attend primary and secondary schools which are far less well-equipped than urban schools. In comparison with urban schools who receive much more public funds, rural schools that receive less public funds provide rural students with a less-equipped learning environment. To illustrate, some schools in urban areas spend a lot of money in building a heating system and an air conditioner for students, while most schools in rural areas cannot even ensure the adequate supply of basic teaching materials like textbooks, chalk, desks, and chairs. Therefore, when urban students enjoy the light, heating system and air conditioning they are able to focus on their studies, while rural students may have to squat down on the ground and practice writing on the ground in
dark classrooms. With sufficient funding, urban schools may have a large library in where its urban students could read books of all subjects and get all information they need. However, textbooks are the main resources for rural students. We could easily conclude from this example that students in rural schools do not get equitable education as students in urban schools because they receive less educational resources that impairs their ability to focus on their studies. In conclusion, lack of public funding limits students’ freedom to access equal education and educational functionings in rural schools. This inequity can also be seen in the average public funds allocation of compulsory education in both urban schools and rural schools.

In comparison to urban schools that receive much more public funds, rural schools that receive less public funds may also provide rural students less opportunities to attend good higher educational institution. A little girl from my neighbor received primary education in our community which is a rural school. She was a very excellent student and was always number one on all examinations. This school provides its students with ordinary mathematics course and textbooks. When she graduated from primary school, she planed to take secondary education in the top school in my city. However, she failed in the entrance mathematics examination because she did not know of International Mathematical Olympiad. Her school provides its students with ordinary mathematics course and textbooks which meet the minimum limitation of Education Ministry of China. In comparison with her counterparts in most urban schools that provide their students with extracurricular training and workbooks on International Mathematical Olympiad aiming at improving levels of mathematical achievements and rates of admission, she was at a great disadvantage. We could not blame her for lacking effort. She was at a great
disadvantage and was deprived from equitable education, not because she was not willing to learn, instead because she was deprived from learning more due to the unequal funding allocation. The outcome in this example is due to a substantial inequality of capabilities.

The public resource disparity between rural and urban schools negatively influences their students’ educational opportunities and their educational achievements. Reimers (2000) stated that many of the constraints to equal educational opportunities are in the schools themselves. The school type that children attend greatly influences how much they learn, and the differences between schools account for the variation in student learning outcomes. In other words, urban school students usually learn more and have better educational achievement than rural students. The free basic education in poor rural areas in China generally provides low education quality due to the poor public sources available, which leads to significantly high dropouts in basic education and low enrollment of poor rural children in higher education (Chung and Mason, 2012; Wang et al., 2011; Zhang, 2014). For example, urban schools may have experimental facilities or school libraries, which rural schools usually do not have. Experimental facilities improve students’ practical ability, and libraries provide students with resources to learn more of various subjects. These facilities may make great differences on how much their students learn, therefore, on students’ educational achievements. Chung and Mason (2012) stated that children from poor rural families were more likely to drop out of school earlier, have poor education and display poor performance as a result of the lack of and unequal distribution of school resources. When rural low-income students get very low educational achievements, they may drop out of school in consideration of high educational costs. In Chung and Mason’s (2012) study, they provided an example of a
rural student named Liu Zhi. Due to lack of funding, Liu Zhi’s school did not have enough teachers and classrooms, he had to study in a multi-grade classroom, with the first graders and the third graders sat together in a multi-grade classroom. When the teacher was teaching one of the grades, the other grades had to do self-study. The schools also cannot provide various courses to accommodate students’ diverse interests. Finally, Liu Zhi cannot focus on the study because of multi-grade teaching and did not have opportunities to learn what he was interested in. As a result of lack of teachers and educational resources, he dropped out of school when he was in fifth grade. In addition to multi-grade classroom, rural schools also experienced consolidations because of problems like funding difficulties (Xie & Wu, 2013; Dong, Chang & Bai, 2013). Xie & Wu (2013) & Yu (2013) pointed out that school consolidations may result in high dropout rates at rural schools, because the cost of traveling to schools and attending boarding schools increased rural families’ financial burden and caused them to reconsider their plan for their children’s education. School consolidations usually bring about larger class sizes and insufficient educational facilities (Xie & Wu, 2013; Yu, 2013), while negatively affect students’ educational achievement (Dong et al., 2013). With regard to Sen’s capability approach, it is clear that the level of access to schooling and educational resources enjoyed by students from rural schools was not an adequate access. It is difficult for students of these rural schools to choose the lives that they might have reason to value. The lack of public educational resources limited their ability to foster their educational capabilities and freedom.

In addition, Xu (2010, p. 203) states that “teachers who work in high-poverty and low-performing districts are likely to transfer to less demanding, more affluent districts
when given the option.” This might be the most serious and consequential factor that negatively influences rural students’ educational opportunities. As might be expected, teacher salary and working environment are critical for teachers when choosing a workplace. Most teachers may choose urban schools which provide higher salary and better working environment. This explains how unequal public resources allocation causes the inequity that “least qualified, lowest-paid teachers tend to congregate in schools with the highest numbers of poor and low-performing children” (Xu, 2010, p. 198).

Changing school context could improve the learning opportunities for the young children for which they are responsible. Thus, it can be seen that this approach took cognizance of the contextual realities of disproportionate opportunities for personal autonomy between rural students and urban students within the compulsory education in Shanghia. Using Sen’s capability approach lens to view the public funds allocation highlights the questions which influence the attempts to connect the capability approach with educational resource allocation. In other words, it helps to seek to narrow what Sen (1999) has called the ‘capability space’, which is related to all functionings an individual can potentially achieve. In accordance with Sen’s capability approach, equality refers to equal effective opportunities for educational functionigns. What matters in terms of equality of capabilities is not the equality in achieved functionings. Rather, it is the opportunities that individuals must have in order to develop their educational functionings and ultimately freedom.

However, Tables 5, 6, 7 & 8 show the huge gaps on both the overall public funds and the average public funds between rural and urban school. The public funds allocation
shown in Tables 5, 6, 7 & 8 reflects the unequal realities of disproportionate educational opportunities for rural students and urban students within the compulsory education in Shanghia. This indicates that rural students do not have equal freedom and opportunities to achieve educational functionings as urban students do. To ensure that students in rural schools can develop equal capabilities as urban students can in order to live the lives they have a reason to value, provision of more public funds should be allocated to rural schools. Rural schools should receive more public funds in order to ensure their ability to achieve equal educational freedom and equal educational functionings.

In conclusion, the pursuit of equity in education must focus on bridging the gap of public funds between urban and rural schools. Providing rural schools with adequate public funds is essential for rural students to achieve equal and effective educational functionings, thus, achieving equal and effective participation in society as their counterparts in urban areas. Therefore, it is critical to bridge the funding gap in public funds between urban and rural schools.
CHAPTER V
CONCLUSION

In this chapter, I first summarize the main findings of this study. Then I examine the limitations of this study. I reaffirm concerned researchers’ advocacy to bridge the funding gaps between urban and rural schools in China. In line with Amartya Sen’s capability approach, I further recommend that the government in China conduct comprehensive educational needs assessments in rural schools in order to provide rural students with responsive and accessible educational resources and services.

**Main Findings of the Study**

Yao (2012), Zeng & Chai (2010), Wang (2011), Bao (2006) have noted the disparities between rural and urban schools in China. Drawing from the data collected in the China Educational Finance Statistical Yearbooks, this study finds significant gaps in financial assistance between urban and rural schools in Shanghai, China within the years 2004 to 2011. Notably, even though the difference in percentage on total financial assistance funds between urban and rural schools in compulsory education decreased from 2004 to 2011, there were still significant gaps of 61.20% and 39.93% in funds for junior secondary schools and primary schools, respectively. During this time the difference in percentage on average financial assistance funds per student between urban junior secondary schools and rural junior secondary schools in compulsory education
persisted with a difference of 17.60% in 2011. The difference in percentage on average financial assistance funds per student between urban primary schools and rural primary schools in compulsory education increased significantly from 2004 to 2011, with the difference of 20.96% in 2011. As discussed in Chapter III, financial assistance provides low-income students with opportunities to access quality education, therefore, to increase their capabilities and develop their functionings. From the standpoint of Amartya Sen’s capability approach, the funding gaps in financial assistance could limit low-income rural students’ freedom and capabilities to achieve their desired levels of educational functionings. In other words, rural students do not have equal freedom and opportunities to achieve the educational functionings as urban students do. To ensure that students in rural schools can fully develop their capabilities and live the lives they have a reason to value, it is critical to bridge the funding gaps in financial assistance between urban and rural students.

This study finds that there are significant gaps in public funds between urban and rural schools. Even though the differences of percentage on total public funds and average public funds per student between urban and rural schools in compulsory education decreased from 2004 to 2011, the differences were still significant. In 2011, the difference in percentage of total public funds between urban and rural schools was 72.02% in primary education, and 66.70% in junior secondary education. In 2011, the difference in percentage of average public funds per student between urban and rural schools was 66.42% in primary education, and 41.00% in junior secondary education. Because of inadequate public funds, rural students usually attend primary and secondary schools that are under resourced. As a result, rural students are less able to develop their
capabilities and attain their desired educational functionings. In addition, the gaps in the area of public funds between rural and urban schools affect students’ educational achievements. The dropout rate in rural schools is higher than that of urban schools leading to lower enrollment of rural students in higher education. Due to the lack of adequate public funds, rural schools have not been able to recruit qualified teachers in rural schools. Consequently, rural students do not have equal freedom and opportunities to fully develop their capabilities and achieve educational functionings. To ensure that students in rural schools can fully develop their capabilities as can urban students, it is critical to provide rural schools with more public funds so that all students can achieve and effectively participate in the society.

Limitations of the Study

Though this study sheds light on the funding gaps between urban and rural schools in China, there were some limitations to this study. First this study is based on the data collected in the CEFSY. Although the CEFSY is an annual official publication, the authors of the CEFSY did not provide information concerning the margin of error in their data collection. As a result, it is virtually impossible to verify the accuracy of the data included in CEFSY. In recognition of this limitation, I suggest that the Finance Division of the Ministry of Education and the Social Science and Technology and Cultural Industries Statistics Division of the National Bureau of Statistics of the People’s Republic of China should make concerted efforts to ensure accuracy of data collection included in the CEFSY.

A second limitation is this study’s focus on funding gaps in the areas of financial assistance and public fund. Zhao & Bruno (2011), Zhang & Zhao (2006), and Ding (2008)
argue that teachers play very important role in facilitating students’ development. Due to the scope of this study, I was unable to examine the funding gaps in the area of teachers’ salaries and benefits. To gain a more comprehensive understanding of the overall funding gaps between rural and urban schools, it is critical that future research include more comparative studies of the funding gaps in the area of teachers’ salaries and benefits and any other factors contributing to inequality in education.

**Recommendations**

Recent research literature on rural education in China includes solutions and suggestions that the researchers believe will effectively address and amend problems of rural education. Specifically, Wang (2007 & 2011) and Zeng & Chai (2010) recommended that Chinese government allocate more education funding for public schools, especially public schools in rural areas. Wang (2007), Li (2011), Ding (2008), and Zhang & Zhao (2006) recommended that China shift the current financial system from farmers’ being responsible for rural educational finance to a system where the government is accountable for rural educational finance. Wang (2007) recommended that the government make efforts to increase rural teachers’ salaries and benefits and guarantee they can get their salaries on time. In addition, governments should encourage teachers in urban schools to consider working in rural areas by providing more benefits for teachers who commit to working in rural schools for a long term (Wang, 2011). In other words, the government should create incentives for qualified teachers to teach in rural schools for at least one year, in order to make sure more qualified teachers work in rural schools.
Feng (2007) and Zeng & Chai (2010) point out that preparing students for higher education should not be the only purpose of rural education. Zeng & Chai (2010) recommended that rural schools aim to equip rural students with essential knowledge and skills to improve rural areas. In addition, rural education should also aim to provide future laborers with vocational training so that they have more opportunities to get jobs in big cities (Feng, 2007; Zeng & Chai, 2010).

Based on the findings in my study, I recommend that future studies focus on conducting comprehensive educational needs assessments in rural schools so that the government can provide adequate and responsive funding to support rural students’ developing their capabilities and achieving their educational functions. Instead of solely providing cash to low-income students, the comprehensive educational needs assessment can enable the government to explore viable alternative policies to support rural students. For instance, government could consider providing food stamps as well as cash card in order to prevent hunger in rural students. In the U.S., food stamp program not only provides low-income families with food but also contribute to lowering the risk of child abuse and neglect reports, and nutrition related health problems like anemia, failure to thrive, and nutritional deficiency (Lee & Mackey-Bilaver, 2006). However, there are demerits in food stamp program, Krueger, Rogers, Ridao-Cano & Hummer (2004) find that food stamps programs often lead to either negligible or harmful effects on the health for infants, children, and adults. In China, the living conditions of rural low-income families are different from the living conditions of low-income families in the U.S. Many rural families in China grow crops and vegetables; thus, it is unknown that whether or not they need assistance of food stamp. Thus, future studies should focus on assessing rural
families’ needs so that the government can provide adequate funding support to ensure rural students’ educational freedom and opportunities.

In conclusion, educational funding plays a key role in determining whether all individuals have equal opportunities to develop and flourish. Educators and policy makers should work towards providing equal learning opportunities to urban and rural students. Providing all students with equitable educational opportunities could facilitate the transformation of students’ capabilities into functionings so they will be able to enjoy the lives they have reasons to value.
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