Chapter 2
Higher Education Transition and Academic Mobility in China

It is widely recognized that globalization is transforming higher education worldwide including the case of China. During the past decade, the Chinese government has been vigorously reforming its higher education system to make it more internationally oriented. This chapter gives a detailed discussion of global higher education transition and academic mobility within a wider context of China.

2.1 The Changing Landscape of Global Higher Education

The global transition of higher education is characterized by increasing flows of institutions, programs, students, and scholars as well as the changing relations between universities, governments, and the market (Marginson and van der Wende 2007; Altbach et al. 2009). According to Altbach et al. (2009), there are more than 2.5 million international students around the world, and this number is estimated to reach 7 million by 2020. Although there is no specific number of mobile university researchers and scholars, the scale of their movement has become more intense than ever before (Marginson and van der Wende 2007). In addition to the flow of people, other forms of mobility are also taking place with unprecedented speed and frequency. These involve short-term academic travel (i.e., lecturing, attending conferences and seminars), research collaborations, joint degree programs, off-shore campuses, and distance-education programs.

All of these forms of flows have intensified global academic networks and shaped a common space, which Marginson and van der Wende (2007) described as "global higher education 'landscape'" (p. 16). To them, this landscape is shared by international, regional, and national agencies, educational corporations, non-governmental organizations, and other individuals with active interests in cross-border relations. They argued that the global higher education landscape, in which these encounters take place, is not stable or fixed but is always in a process of changing and being reshaped under the influences of different national and local

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practices. In turn, the global forces are disturbing the boundaries of nationally located higher education systems and affecting the daily practices of individual institutions and the actors working within them. Thus, the work of higher education, as historically anchored in a national space, is currently being remade as the global flows touch down and as local actors reach out (Sassen 1996) through shared relations and networks in the global landscape.

However, the global flows in higher education are by no means smooth. Expansion of the English language–based research community has contributed to concentrating the ownership of publishers, databases, and other key resources in the hands of a few Anglo-American countries (Altbach et al. 2009), thus putting non–English speaking countries, especially those in the developing world, at a disadvantage. Meanwhile, the development of global ranking systems, such as the Academic Ranking of World Universities by Shanghai Jiao Tong University (SJTU), have further intensified the tension because they place emphasis on Nobel Prizes, international publications, and citations, all in the English language. This is evident in the latest Academic Ranking of World Universities 2013 by SJTU: Among the world's top 20 research universities, 17 are from the US, and two are from the UK.[1] As a result, universities in English-speaking countries are in a better position to allocate resources and attract the best academics globally.

The popularity of global university ranking reflects the recent trend of competitiveness and marketization in higher education promoted by the expansion of knowledge economy (Deem et al. 2008; Margison and van der Wende 2007). This has great effects on the way in which higher education is defined and operates in national economy. Universities are seen as a key driver of economic development; it is believed that the ability of a country to compete globally largely relies on the production of higher value-added products and services, which in turn dependents on knowledge and innovation (Naidoo 2007). This view is widely accepted among nations, especially in developing countries, which regard quality higher education as a central means of economic productivity and technological innovation as well as a way to improve their position and competitiveness in the global arena. As a consequence, higher education institutions are encouraged to promote reforms toward human capital agenda and education's economic goals including developing links with industry and business (Rizvi and Lingard 2010; Slaughter and Rhoades 2004; Olssen and Peters 2005). There are common themes across nations related to individual betterment such as self-sufficiency, greater accountability, and greater market efficiency (Altbach et al. 2009).

Furthermore, the agenda of knowledge economy becomes highly influential in shaping how universities are performing (Deem et al. 2008). This is evident in the emergence of entrepreneurial universities (Clark 1998) or a new academic capitalism in higher education (Slaughter and Leslie 1997). According to Slaughter and Leslie (1997), universities today are becoming increasingly engaged in market-like

[1]For details about Academic Ranking of World Universities 2013, see http://www.shanghairanking.com/ARWU2013.html.

behaviors and viewing themselves as if they were for-profit businesses. They presented convincing evidence, through their case study on universities in the USA, Australia, Canada, and the UK, that this market-oriented thinking has driven universities and academics toward more entrepreneurial activities and thus fundamentally changed the public purposes and academic workforce of the university. This form of academic capitalism is traveling around the world, thus affecting the work of universities and individual academics globally.

2.2 Higher Education Transition in China

Under the influences of knowledge economy, China has restructured its higher education system against a backdrop of its emergence as a powerful economic force in the global arena (Mok and Lo 2007). There is a strong political desire for the Chinese government to develop its higher education system to meet both the internal need to transit to a market economy and external pressure to be globally competitive (Zha 2011). Therefore, a state-driven reform of higher education is underway in China through policies of expansion, internationalization, and reform in governance and finance (Huang 2007; Li and Chen 2011; Mok and Chan 2008; Yang 2002). Specifically, these reforms include decentralizing university governance; diversifying funding sources; intensifying the relations between production, teaching, and research (*chan-xue-yan jiehe*); and promoting university internationalization through collaboration and mobility (Li and Chen 2011; Zha 2011). In terms of financing, China used to have a tradition of total state support for its higher education. However, current data show that state funds declined to 47.6 % by the year 2008 (National Bureau of Statistics of the People's Republic of China 2010). The shrinkage of public funding on higher education has driven universities to derive operating funds from tuitions and fees (the ratio was 33.7 % in 2008), research grants, university-run businesses, and other service provisions. These changes reflect the global trends toward market efficiency and the circulation of academic capitalism, thus emphasizing the links between universities and industry as well as commercializing programs to meet the needs of the market.

As a result, China has expanded its higher education system; the gross enrollment rate increased from 3.4 % in 1990 to 30 % in 2012 (see Fig. 2.1), indicating that China moved from elite to mass higher education.[2] By the year 2012, the total number of students enrolled reached 33.25 million (MOE 2013), which made China the world's largest tertiary system according to absolute student numbers.

[2]According to Martin Trow (1972), there are three stages of higher education: elite, mass, and universal education. The elite-education stage refers to gross enrollment rate less than 15 %; the mass-education stage refers to a rate between 15 and 50 %; and the universal-education stage refers to a rate more than 50 %.

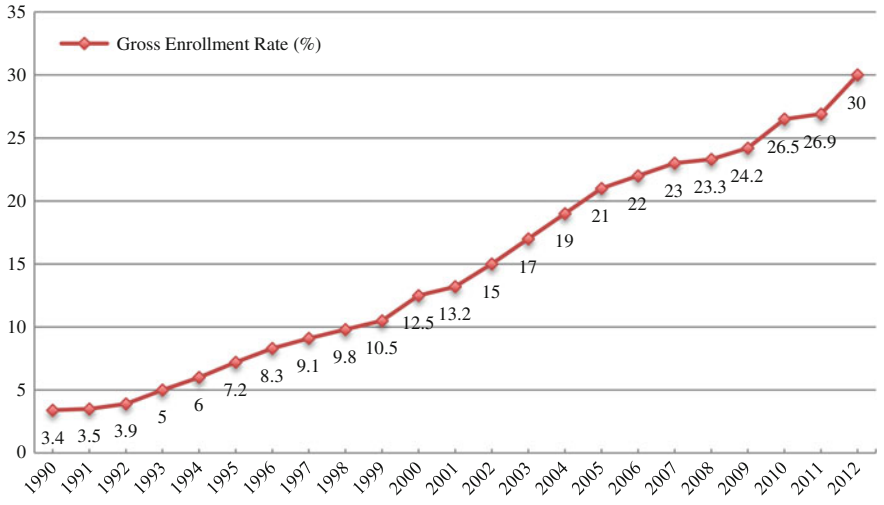

Fig. 2.1 Gross Enrollment Rate in Higher Education in China from 1990 to 2012. *Sources* Data of 1990–2010 are from China Education Statistics (2010). Gross enrollment rate of schools by level. Retrieved from http://www.stats.edu.cn/sjcx.aspx#. Data of 2011–2012 are from Ministry of Education of People's Republic of China [MOE] (2013)

However, the expansion in China is mainly taking place in provincial institutions and short-cycle higher vocational colleges. Their student enrollment increased from 1.79 million in 1997 to 11.89 million in 2005. The expansion in elite universities is relatively small; their enrollment numbers increased from 1.36 million to only 1.63 million during the same period (Zha 2011). This expansion pattern is steered by a deliberate policy of creating a hierarchical structure of higher education with the national elite universities (i.e. those in Project 211 and Project 985, see below) at the top; provincial universities, independent colleges,[3] and some private universities in the middle; and higher vocational colleges and non-degree private colleges at the bottom. This institutional stratification enables China to maintain the world's largest higher education system while at the same time strive for elite standing of its top universities at a global level (idem 2011). Here I focus on the case of China not because China is an exception in regard to implications of massification of higher education. Instead, the institutional stratification, as one of the noteworthy characteristics of higher education, is going on worldwide (Marginson and van der Wende 2007). What I want to highlight is how China takes this on in very particular ways in the form of building world-class universities through specific policies.

[3]Independent college is a new type of higher education institution in China. It is attached to a state-owned university but invested by non-governmental organizations and individuals. The first independent college was founded in 1999. As of 2010, there were a total of 323 independent colleges in China.

Project 211 and Project 985[4] are the two major programs to stimulate excellence of the elite universities in China, through which the Chinese government concentrates a considerable amount of funding on a small number of selected universities or disciplines to ensure high quality in teaching and research (Li and Chen 2011). Project 211,[5] launched in 1993, is the Chinese government's great endeavor to strengthen approximately 100 higher education institutions and key disciplinary areas as a national priority for the twenty-first century. During the period of 1995–2011, the central government invested a total of 18.75 billion RMB (approximately $3 billion)[6] to 112 universities admitted to this project (MOE 2008). In 1998, China further concentrated its efforts to promote the development of its elite universities by launching Project 985, named after the date it was launched (May 5, 1998) when the former president Jiang Zemin asserted that China must have several first-rate universities at the international level (MOE 1999). Project 985 marks a second step in stimulating excellence of universities so that they can compete effectively in global standing (Mok and Chan 2008).

In the initial stage of Project 985, only nine top universities (called "C9 League universities")[7] were selected to be intensively funded by the government. By the year 2010, a total of 39 universities were included in the list of world-class universities. This project prioritizes a strategy that concentrates limited resources on a small number of institutions with the greatest potential for success in the international academic arena (Li and Chen 2011). To achieve this goal, the central government and local governments at various levels allocated significant additional funding to 985 member universities. For example, the total financial support from the central government for Project 985 universities was 14.0 billion RMB (approximately $2.25 billion) and 18.9 billion RMB (approximately $3.04 billion) during the two phases of 1999–2001 and 2004–2007, respectively (Wang et al. 2011). In addition to improving infrastructures and developing disciplines, much of the 985 funding has been used to build international networks including holding international conferences, attracting world-renowned faculty and visiting scholars,

[4]In June 2016, the Ministry of Education of China announced that the Project 211 and Project 985 are no longer valid. The invalidation of these two projects has been interpreted as bringing to an end of a national plan of establishing a few world class universities and colleges in China. The national plan for higher education now focuses on deepening reform in a comprehensive way, through implementing measures to establish world first-class universities and world first-class disciplines, also called double first-class ("shuang yiliu"). Supporting measures are in progress.

[5]The figures of 21 and 1 within the name 211 comes from an abbreviation of the twenty-first century and approximately 100 universities.

[6]Throughout this study, the currency exchange rate used was 1 Chinese Yuan ≈ 0.16 US dollars as per the exchange rate on March 1, 2014.

[7]The C9 League is an alliance of nine top universities in Chinese Mainland including Tsinghua University, Peking University, Harbin Institute of Technology, University of Science and Technology of China, Fudan University, Zhejiang University, Nanjing University, Shanghai Jiao Tong University, and Xi'an Jiao Tong University.

and supporting students and faculty to study or attend conferences abroad (Mok and Chan 2008). Undoubtedly, the 985 member universities have benefited from the project. Their institutional capacity for teaching and research has improved, and their competitive edge in advanced areas has sharpened (Li and Chen 2011). They are also in a better position to attract global talent and to explore ways to partner with top universities worldwide.

Furthermore, China has also been remarkably open in its approach to internationalizing its higher education institutions. Universities, especially those under Project 211 and Project 985, have been actively promoting internationalization via such practices as encouraging transnational research collaboration and joint-degree programs, recruiting international students, hiring global talent and overseas returnees, internationalizing curriculum through study-abroad programs, and using English as a medium of instruction (Huang 2007; Li and Chen 2011). These processes have been further accelerated under the stimulation of global university rankings, which place national higher education systems and individual institutions in the global competition arena. Although once satisfied to be the best at the domestic level, today the top universities in China are using international standards (or Western standards, to be exact) to define excellence (Mohrman 2005). Thus, many top universities are mimicking what American universities do by providing better resources, encouraging research and publications, and introducing the ideas of efficiency, competition, and accountability of faculty performance. In this way, the Western model of higher education is greatly influencing the direction of university reforms in China.

Moreover, pressures for global competition have also changed the academic professions in China. Contrary to the previous metaphor of "iron rice bowl" (a lifetime job with guaranteed security and benefits)[8] used for faculty jobs, many universities are adopting recruitment policies based on contracts with "up or out" practices to make their academic performance accountable (Yi 2011). Faculty are encouraged to publish in international journals, particularly those under the catalogues of SCI (Science Citation Index) or SSCI (Social Science Citation Index) journals. Publishing successes are directly linked to generous cash rewards and/or honorable titles from the institutions (idem 2011). The increased emphasis on research and publication also pushes academics, particularly those in natural science and engineering, to turn to applied research topics in order to gain more outside funding and achieve quick results.

For better or worse, under the influence of the changing landscape of global higher education, China's higher education system has placed great emphasis on accountability, transparency, competition, and more decentralized decision making (Mohrman 2005; Yi 2011). Many institutions have adopted new rules, paradigms, and some so-called "good practices" (Deem et al. 2008, p. 93) identified from the Western model of higher education for institutional innovation. These, to a great

[8]"Iron rice bowl" is a Chinese term used to refer to a government-funded job with steady income and benefits and guaranteed job security.

extent, have improved the efficiency and quality of education in Chinese universities. Despite the improvements, this more market-oriented higher education system has been criticized as promoting individualism and market benefits, which leads to poor morale among many faculty (Yang 2005). It is also criticized as increasing the gap between the "have" and "have not" universities, departments, and programs (Mohrman 2005; Mok and Lo 2007) and thus turning higher education into a more business-like sector rather than a learning center.

It is worth noting that the market forces in Chinese higher education do not operate in the same way as those in many western countries such as the US. The central government still holds substantial control on its universities from internal governance (manifested by the dual-leadership system of university governance[9]) to important decision making (i.e., student admission, the quota of students for each institution and program, the quota of faculty, university president appointment, and awarding of degrees) (Yi 2011). For example, in terms of student enrollment, although American universities compete to attract the best students, the admissions of Chinese universities are based solely on students' points scored in the National College Entrance Examination (*Gaokao*)[10] organized by the MOE. Because the demands for access to higher education are so great and the competition to enter into the top universities is so fierce, there is no real need for universities to offer something unique to attract students (Mohrman 2005). From this perspective, market forces appear to be less significant in China's higher education system.

As a result, there is a lack of diversity within different levels of institutions because they need follow the basic guidelines and suggestions proposed by the MOE in their major reform programs. Perhaps this is why there is a greater homogeneity among the top universities in China because they are reforming in similar ways of questing for world-class university status. As Mohrman (2005) commented, "… a market system in which institutions tout their unique features has not yet formed in Chinese higher education. The Ministry of Education may be letting a thousand flowers bloom but they are all of the same species" (p. 232). Therefore, it can be argued that although market forces have been influencing China's higher education system from a state-planning model to a more market-based system, it will never operate the same way as that the ones in many Western countries.

[9]Chinese universities adopt a dual-leadership governance structure. That is, the university Communist Party Committee, directed by the Party Secretary, works in parallel with the administrative system led by the university president in internal governance. Both the party secretary and the president are appointed by the Chinese government.

[10]*Gaokao* is a Chinese term for the national college entrance examination, which is a prerequisite for entrance into almost all higher-education institutions in China. It takes place only once per year in early June (June 7–June 8 or 9) and spreads over 2–3 days. All high school graduates throughout the country sit the exams during the same period. As this exam is essentially the only criterion for college admission, it is understandable that students become extremely stressed before the exam. Given the numbers, the repercussions, and the stress involved, *gaokao* has been described as one of the most pressure-paced examinations in the world.

2.3 Return Academic Mobility in China

This section focuses on studies on return mobility of Chinese academics in higher education. The history of study abroad in China can be traced back to as early as the 1860s when the Qing government decided to send a group of school-age students to study in the US. Although they were subsequently recalled before finishing their study, the returnees made great contributions to the transition of the imperial to modern China (Li 2005; Welch and Hao 2013). Later study-abroad movements were then represented by the waves of "Japan fever" (1896–1911), "studying in the US with the Boxer Indemnity Funds" (1896–1911), "the work-study program in France" (1911–1924), "political study in the Soviet Union" (1921–1930), and "studying in socialist countries" (1950–1965) (Li 2005).[11] These movements served as catalytic forces in the development of the new China toward modernization.

The current study-abroad movement was initiated by Deng Xiaoping in 1978 and represents the largest study-abroad movement in Chinese history (Li 2005; Zhu 2009). According to MOE's statistic data, during the period from 1978 to 2013 (see Table 2.1) a total of 3,058,600 Chinese students and scholars (also called *liuxue renyuan*) went abroad for overseas studies; 1,144,800 returned, accounting for 37.43 %. Although the return rate is small compared with the total number of *liuxue renyuan* abroad, the latest data shows that the number of returnees has increased dramatically since 2008.

2.3.1 China's Post-1978 Policies Toward Study Abroad and Return Mobility

In 1978, after a decade of isolation from the international academic community, Deng Xiaoping decided to send a large number of *liuxue renyuan* (Chinese students and scholars) to study abroad to learn advanced Western knowledge and practices in order to make up the years of lost from the Cultural Revolution[12] (Li 2005). This sending of *liuxue renyuan* abroad is often regarded as the beginning of China's opening up to the outside world (Cao 2008). From 1978 to 1980, a total of 4,761 *liuxue renyuan* were studying abroad, and most of them were supported by public funds. In 1981, the State Council issued a document *Interim Provisions for Study Abroad with Self-Funding*, which permitted students to study abroad at their own expense. Since then the number of self-funded students has increased dramatically.

[11]For details of the study abroad movements before 1978, see Li's (2005) study on "Coming home to teach: Status and mobility of returnees in China's higher education," in Bridging Minds across the Pacific: U.S. China Educational Exchanges, p. 72.

[12]The Cultural Revolution is a 10-year period of turmoil in China from 1966 to 1976. During this period, students and scientists were sent to the countryside for hard physical labor when research and higher education were virtually halted.

Table 2.1 Numbers of Chinese Students and Scholars Leaving for and Returning from Overseas Studies 1978–2013

Year	Number leaving	Number returning
1978	860	248
1980	2124	162
1982	2326	2116
1984	3073	2920
1986	4676	1388
1988	3786	3000
1990	2950	1593
1992	6540	3611
1994	19,071	4230
1996	20,905	6570
1998	17,622	7379
2000	38,989	9121
2001	83,973	12,243
2002	125,179	17,945
2003	117,307	20,152
2004	114,682	24,726
2005	118,515	34,987
2006	134,000	42,000
2007	144,000	44,000
2008	179,800	69,300
2009	229,300	108,300
2010	284,700	134,800
2011	339,700	186,200
2012	399,600	272,900
2013	413,900	353,500

Sources Data from 1978 to 2006 are from Cao (2008)
Data from 2006 to 2013 are based on annual report on overseas studies from various years (2006–2013), from the website of the Ministry of Education, http://www.moe.gov.cn/

During the period from 1984 to 1988, the number of students who were self-sponsored was nearly the same as those who were state/institution-sponsored. Since 1990, self-sponsored students accounted for a majority of China's *liuxue renyuan*. In 2013, for example, of 413,900 students who went overseas to study, 16,300 were state-sponsored (3.9 %), 13,300 were institution-sponsored (3.2 %), and 384,300 (92.8 %) were self-funded (MOE 2014).

In the early 1980s, most Chinese *liuxue renyuan* returned to China because approximately 80 % of them were state/institution-sponsored visiting scholars and there were legal requirements for them to return (Zhu 2009). Since the mid-1980s, as more self-sponsored students went abroad for graduate studies, the number of returnees began to decrease. However, the large amount of brain drain did not

happen until 1989 when the Tiananmen Incident[13] marked a watershed for the return of Chinese nationals (Cao 2008). Afterward, the US government passed the *Chinese Student Protections Act* in 1992, which allowed Chinese students and scholars to stay and work in the US, Canada and Australia, as well as other western countries, also issued similar protection acts, which granted the students permanent resident status or extended their stay. As a result, approximately 50,000 Chinese students in the US, 10,000 in Canada, and more than 20,000 in Australia chose to stay in their host countries (Li 2005). This represents "the first large unexpected exodus" (Cao 2008, p. 333) of highly educated Chinese who were expected to return to China to make a contribution to the development of China's science and technology.

Consequently, the Chinese government adopted more conservative policies of study abroad and deliberately decreased the number of state- or institution-sponsored students (Zhu 2009). A major policy restriction was that those who wanted to go abroad as self-funded students must serve in China for a certain number of years (5 years for undergraduates and 7 years for graduate students), or they would have to pay back to the government the tuition cost of their higher education in order to leave China.[14]

Despite the policy restrictions, the Chinese government did not close the door on overseas studies. In 1992, during his "Southern Tour,"[15] Deng Xiaoping reaffirmed the importance of overseas study by stating that "China should not stop sending students abroad just because few have returned, and that even if half of the overseas students do not return, the remaining half would help the country" (Cao 2008, p. 333). Later that year, the central government issued *A Circulation on Studying Abroad*, which loosened many restrictions (i.e., service period) on going overseas (Keren et al. 2003). In 1993, a guiding policy regarding studying abroad, "supporting overseas studies, encouraging return, and securing free movement" (*zhichi liuxue*, *guli huiguo*, *laiqu ziyou*), was proposed. Since then, the policies regarding study abroad have been stabilized (Zhu 2009), and the number of students leaving for overseas studies has increased dramatically with a large proportion of them self-sponsored.

Meanwhile, with the advancement of the market economy and the increasing emphasis of the role of human capital in national competitiveness, China's needs for talent became more clear and urgent. In 1997, Jiang Zeming, president of China at that time, accounted a new policy of "revitalizing the nation through science and education" (*ke jiao xing guo*) to highlight the vital role of education and science in China's economic development. As part of this effort, Project 211 was announced

[13]The Tiananmen Incident was student-led popular demonstrations in Beijing in spring 1989 to protest for greater democracy.

[14]Traditionally, Chinese universities were tuition free. The government provided stipends for students that covered most of the costs of accommodations, books, and living expenses. In 1994, some universities began to charge tuitions. Since 1997, all students have to pay tuitions and fees.

[15]Southern Tour: In early 1992, the former leader Deng Xiaoping paid a tour to a few cities in the south of China, including Shenzhen. During the tour, he stressed the importance of developing a market economy in China and urged the Chinese people to further emancipate their minds, opening up to the outside world.

to support 100 top universities with extra funding. Later, in 1998, Project 985 was initiated to further concentrate resources for 39 top universities in order to help them become world-class universities. To meet this goal, both the government and the institutions were aggressively recruiting scholars from overseas, aiming to raise China's research capacity to international standards. For example, approximately 20 % of the funding given to 985 universities went to hiring foreign-trained academics.

Furthermore, the Chinese government launched various programs—including the Hundred Talents Program (*bairen jihua*), Chunhui Scholar Program (*chunhui xuezhe jihua*), Program of Introducing Discipline-Based Talent to Universities (also called 111 Project" (*yinzhi jihua*), Project of Thousand Talents (*qianren jihua*), and Project of Thousand Youth Talents (*qingnian qianren jihua*)—to entice overseas talent back to participate in China's economic development (for details, see Table 2.2).

The two programs that are of greatest importance to this study are the Thousand Talents Program and Project of Thousand Youth Talents. Project of Thousand Talents was launched in 2008 as a way of attracting top overseas Chinese academics (those who have an academic title equivalent to full professorship in world-renowned universities), managing staff (those who work as a senior manager within a well-known company), and entrepreneurs (those who have developed technologies, obtained patents, and owned their own business). This program offers a relocation package of 1 million RMB ($160,000) for living allowance and a minimum of 10 million RMB ($1,600,000) as a one-time, start-up funding for setting up laboratories.[16] Compared with earlier talent programs, this new scheme sets both the bar higher and the net wider. It is also the first talent program under the direction of the General Office of the Central Committee of the Chinese Communist Party. This indicates how seriously China wants talent. By the year 2013, it had drawn back more than 2000 top-notch overseas Chinese, over half of whom were academics.

Due to its success, a follow-up strategy, the Project of Thousand Youth Talents, was launched in 2011. This program lowers its bar to "rising stars" that are younger than 40 years old. It targets those who have obtained a doctoral degree from a world-renowned university and have at least 3 years of overseas research experience. In terms of monetary incentives, it offers 0.5 million RMB ($80,000) living allowance and research funds of up to 3 million RMB ($480,000) over 3 years. These two programs have achieved notable success in luring some of the best foreign-educated Chinese people.

In addition to the central government, local governments have also shown considerable interest in attracting those with foreign education or work experience. Many local governments set up their own talent schemes that are independent from, and in some cases, ahead of central initiatives. Shanghai is one of the most successful cities in encouraging the return of overseas Chinese. It is also one of the first cities to issue permanent residence visas for returnees with foreign passports (Zweig 2006). From 2008 onward, the Shanghai government issued and implemented the Eastern

[16]For details see http://www.1000plan.org/.

Table 2.2 China's Overseas Talent–Recruitment Programs

	Name	Responsible authority	Aim	Benefits	Eligibility	Disciplinary range
1	Hundred Talents Program (1994)	China Academy of Sciences (CAS)	To recruit about 100 outstanding scholars (primarily from abroad) to CAS by the end of the twentieth century	• Provide a budget of 2–3 million RMB for a period of 3 years to establish laboratories in CAS institutes	• Younger than 40 years old (can extend to 45 years old for those who hold an assistant professorship or above in a renowned university abroad); • At least 4 years' research experience	Mathematics, physics, chemistry, life sciences, medical sciences, earth sciences, information sciences, technological sciences
2	Chunhui Scholar Program (1996)	Ministry of Education (MOE)	To support short-term returnees to work in China for China's economic and social development	• Provide generous salary (5–8 times more than domestic professors in an equivalent position); • Free accommodation, round-trip airfare, and insurance during their short-term work in China	• Hold an associate professorship or above at a renowned university or in a key discipline abroad	Natural Science, engineering, agriculture, medical sciences, life sciences, law, economics, and management
3	Program of Introducing Discipline-Based Talent to	Ministry of Education (MOE) and the State Administration	To establish 100 world-leading disciplinary innovation bases by gathering 1000 overseas talent from the top 100	• MOE and SAFEA allocated at least 600 million RMB for the years 2006–	• Hold a professorship at a top 100 world-class university or in an equivalent international research institution;	Mainly science and engineering but also management

(continued)

Table 2.2 (continued)

	Name	Responsible authority	Aim	Benefits	Eligibility	Disciplinary range
	Universities (111 Project) (2006)	of Foreign Experts Affairs (SAFEA)	universities or research institutions worldwide to enhance the innovation capability and overall competitiveness of China's universities at global level	2010 for the program	• Younger than 50 years old (can extend to 70 years old for world-renowned scholars); • Required to work at least 3 months per year in China (at least 1 month in the case of world-renowned scholars).	
4	Thousand Talents Program Long-term (2008)	The General Office of the Central Committee of the Chinese Communist Party	To attract high-level talent from overseas to work in China to boost its innovation capability, make key technology breakthroughs, develop hi-tech industry, initiate new disciplines, and promote the integration of industry and research	• Desirable living and working conditions; • 1 million RMB living allowance; • At least 10 million RMB start-up research funding	• Hold a professorship at a renowned university abroad or in an equivalent international research institution; • Should return to China full-time; • Younger than 55 years old	Mainly science and engineering but also finance and economy

(continued)

Table 2.2 (continued)

	Name	Responsible authority	Aim	Benefits	Eligibility	Disciplinary range
5	Thousand Talents Program Short-term (2008)			• Desirable living and working conditions; • 0.5 million RMB living allowance; • At least 5 million RMB start-up research funding	• Hold a professorship at a renowned university abroad or in an equivalent research institution; • Should work in China for a minimum of 2 months per academic year under a 3-year work contract; • Younger than 55 years old	
6	Thousand Youth Talents Program (2011)		To attract high-caliber young talent from overseas to work on key areas to promote science and technology innovation	• Desirable living and working conditions; • 0.5 million RMB living allowance; • 1–3 million RMB of 3-year research funding.	• Holds a doctoral degree from a renowned university abroad; • Has at least 3 years of overseas teaching or research experience; • Should return to China full-time; • Younger than 40 years	Mainly sciences and engineering

Sources: Welch, A., & Hao, J. (2013). "Hai gui" and "Hai dai": The job-seeking experiences of high-skilled returnees to China. In K-H. Mok & K-M. Yu (Eds.), *Internationalization of higher education in East Asia: Trends of student mobility and impact on education governance* (pp. 90–114). New York: Routledge.

Also from the website of recruitment program of global experts [qianren jihua wang], http://www.1000plan.org/. Assembled and tabulated by the author.

Scholars Program (*dongfang xuezhe jihua*) in which it sponsored universities and research institutions to attract 50 overseas scholars each year to work in Shanghai.[17] Along with the policy initiatives, there is a growing interest in the role of China's academic returnees in its higher education, which is the focus of the next section.

2.3.2 Studies of China's Academic Returnees

Ruth Hayhoe was one of the early scholars interested in China's study-abroad movement and the role of returnees in China's democracy movement in 1980s. In her study on foreign-returned intellectuals in seven universities in Shanghai during the period of Tiananmen Incident, Hayhoe (1988, 1990) found that the study-abroad movement has both reflected and contributed to curricular changes in selected universities. However, with special reference to the experience of those in the humanities and social science, she argued that although Western ideas mattered, it was the involvement of the State in the internal exchanges that played a role in the construction of knowledge. In this sense, the study-abroad movement has provided channels for ideas to travel, but it cannot be credited or blamed for the democracy movement. As is discussed in the policy section, the 1989 Tiananmen Incident was a watershed event for the return of overseas Chinese intellectuals, after which the number of returnees decreased significantly.

In response to the "brain drain" phenomenon, Zweig et al. (1995) conducted a survey of 273 Chinese students and scholars in the US concerning their intention to return to China. Their research was influenced by two major historical events: the opportunities for many of the participants to apply for permanent residence status in the US under the *Chinese Student Protection Act* after the Tiananmen Incident, and Deng Xiaoping's famous "Southern Tour" in 1992, which triggered a more liberal economic and cultural climate in China. In their initial finding, they argued that political instability and lack of political freedom were the major reasons that people did not return. These were followed by reasons of lack of quality equipment, difficult conditions at work, and the inability to develop their own career. However, in his follow-up studies of return intentions of Chinese scientists a decade later, Zweig (2006) found that many of the above concerns had been addressed, if not resolved, by the Chinese government. Of responses to the questions of why academics returned to China, the top three selected answers were "China's rapid economic development" (58 %), "good government policy," (47 %), and "good opportunity to develop new technologies in China" (42 %). Clearly, the Chinese government had achieved some success in creating a favorable atmosphere to attract back overseas talent (Zweig 2006), and political stability was no longer the top concern among overseas Chinese compared with 10 years before. In a more recent study on China's

[17]For details, see http://www.shanghai.gov.cn/shanghai/node2314/node2319/node12344/userobject26ai18845.html.

returned scientists, Jonkers (2010) pointed out that the increasing funds invested in science research, the institutional transformation, and the visibility of China's research system are the major reasons behind the new wave of return migration.

Despite the improvement of China's political, economic, and cultural climate, and the preferential policies toward returnees, a large number of the top academics and scientists are still hesitating to return (Cao 2008). In discussing why government policies have failed to attract first-rate academics, Cao (2008) pointed out that low salaries and problems of children's education are the common reasons. More important are institutional factors including the complicated *guanxi*, rampant misconduct in science, and taboos in social science research. He concluded that unless the research culture becomes conducive to first-rate research, China is unlikely to see a large return migration of the best and brightest academics.

In addition to return motivations, some studies have deeply examined the state of returnees in China's higher education including the status, distribution, professional and personal adjustments, and reintegration as well as their self-evaluated contributions to higher education in China (Chen and Yan 2000a, b; Li 2005; Rosen and Zweig 2005; Xu 2009; Yi 2011; Choi and Lu 2012; Welch and Hao 2013). In his quantitative studies of the status and mobility of returnees in China's higher education based on two large databases (one contains data on 850 senior administrators of China's top 100 universities, and the other contains data on 2100 returnees at the top 25 universities), Li (2005) found that (1) there were more visiting scholars (61 %) than degree candidates (30 %) among returned scholars in Chinese universities; (2) there were unbalanced academic fields with a dominance of engineering and natural sciences in overseas studies; and (3) there was uneven regional distribution regarding the prominence of returnees in Shanghai and Beijing. By citing the case of recent reform at Peking University, he also found a strong tension over resources and power between returnees and locals due to the preferential policies to returnees. The assumption behind the preferential policies is that the returnees are "better" than the locals. To test this hypothesis, Rosen and Zweig (2005) conducted a research with 109 returnees and 90 local academics. Their data revealed that the returnees have "won" over the locals in terms of their "transnational capital," a term used to refer to human capital based on knowledge, networks, and resources accumulated overseas that is not available in China. They emphasized the importance of overseas experience in reshaping the power and status of the faculty in the process of internationalization in China. However, from their interview data with the local scholars, most believed that the government "overemphasized" the returnees because they felt that many overseas returnees were not especially talented or "better" than the locals. The conflicts between the returnees and the locals have created challenges for the returnees to better integrate into the local community.

Other challenges faced by returnees include longstanding notions of hierarchy, bureaucracy, respect for seniority, and complicated *guanxi* (Yi 2011; Welch and Hao 2013). Despite the challenges, some studies showed that the returnees play a crucial role in organizational changes and the process of building world-class universities. In their study on foreign-trained academics in 41 business schools in China, Choi and Lu (2012) found that there was a strong relation between returnee

faculty members and the diversification of curricula: Business schools with more returnees tend to provide more diversified curricula. They argued that valuable resources and networks embodied in the returnees helped business schools adopt more international and diverse courses. Moreover, returned scholars are also regarded as a bridge between China and the international academic community who help to improve China's research productivity and competitiveness through "the direct transfer of knowledge and the indirect benefits brought by overseas professional and trade networks" (Welch and Hao 2013, p. 110). This is evident in Jonkers and Tijssen's (2008) research on 76 returnees in the field of plant molecular life sciences. Through a quantitative analysis, they found that there was a positive correlation between foreign experience and the number of SCI publications and international co-publications: Researchers with a higher international visibility tended to be more likely to copublish internationally and have higher SCI publications. They highlighted the importance of transnational scientific linkages within this rapidly emerging and globalizing research field.

In conclusion, the literature reviewed in this chapter created a broader context for the study on academic mobility of Chinese returned scholars. The next chapter turns to a theoretical debate on transnational academic mobility. It draws upon theories from cultural studies to shape the conceptual framework of the study.

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