11

CHANGES IN CHINESE HIGHER EDUCATION IN THE ERA OF GLOBALIZATION

Honggang Xu and Tian Ye

1 Introduction
The domination of free-market economies, predominance of supranational institutions, and the formation of a consumer culture across the globe, in addition to rising costs of public services in general and the evolution of the knowledge-based economy, have all contributed to dramatic changes in the character and function of higher education (HE) around the world (Ohmae 1990; Waters 2001; Sklair 1999; Burbules and Torres 2000; Mok and Welch 2003). Higher education systems in many countries have recently been going through significant restructuring processes to enhance their competitiveness and hierarchical positioning within their own countries and in the global education market, with governments attempting to transform their higher education systems to reflect an image of “world-class” universities (Deema et al. 2008).

In this competitive context, higher education is increasingly tied to national economic prowess, resulting in increased privatization, strategic interactions between higher education and industry, and more managerial forms of governance (Marginson 2013a). Education as a tradable service commodity is clearly stated in the WTO’s general agreement (Shields 2013). The emphasis on incorporation, privatization, accountability and limited government intervention has led to a significant shift away from the social democratic values that previously governed higher education (Rizvi and Lingard 2009). Meanwhile, with increased global mobility, the number of potential students aiming for higher education has expanded from local and national markets to international ones. This global expansion of access to higher education has increased the demand for academic quality and has led to the development of university ranking systems or league tables in many countries (Dill and Soo 2005) as well as internationally.

Since bringing in “open door” economic policies in the late 1970s, China has been participating in the globalization process of higher education (see also chapters by Suttmeier; Delvenne and Kreimer; Tyfield, this volume), and a series of education reforms has been conducted in order to provide increased human capital and increase competitiveness in the global higher education market. Two substantial changes have been observed: growth in the numbers of higher education institutions; and the emergence of more world-class research-oriented universities. As a result of this, China has turned into one of the world’s biggest providers of higher education, and more and more Chinese research universities are entering the ranks of the world’s top universities. However, due to China’s special political, economic
Changes in Chinese higher education

and social environment, this reform of higher education presents a striking contrast with many Western countries, since Chinese higher education institutions (HEIs) are still under the strong control of the central state. In contrast to Western countries, active participation in global competition by HEIs is a top-down process; in addition, individual institutions face significant marketization pressure. This paper aims to explore the restructuring process of Chinese higher education in this era of globalization, as well as its implications.

2 A short history of modern Chinese higher education

2.1 The planning system

The classical Chinese education was based on Confucian ideas in the form “Sishu”, which was focused on moral teaching, history and writing, while mathematics and science were barely taught. After the First Opium War (1839–1842), China’s doors began to open to the rest of the world. Chinese scholars discovered the numerous Western advances in science and technology and started to copy education programs from the Western world (Zhu 1997). By the end of the century this culminated in the establishment of a handful of prominent universities, such as Peiyang University in Tianjin (now Tianjin University) in 1895, Nanyang Public College in Shanghai (now Shanghai Jiaotong University) in 1897, and Imperial University (now Peking University) in 1898. Over time, these universities turned into the leading educational institutions in the country, and by 1949 205 universities had been founded.¹

In the early 1950s, after the establishment of the People’s Republic of China, Soviet influence caused all higher education to be brought under the planning system. The government controlled the number of higher education institutions, their extent, programs, jobs for graduates and funding. Specialized higher education institutions were established and promoted. There was a total of about 60 government ministries, each operating its own higher education institutions. For instance, the Ministry of Agriculture would establish special agricultural universities in different regions inside China, and each agricultural university would supply human resources for the agriculture sector for each particular region. These universities were focused on teaching, and only a few universities, like Peking University and Fudan University, were comprehensive universities, although even here only limited research was carried out. Research was mainly carried out by the Institute of Chinese Academy, set up in the 1950s, a separate system from higher education.

From 1967 to 1976, Chinese higher education was devastated by the Cultural Revolution more than any other significant sector of the economy. All the institutions were closed during the early stages, and later only enrolled certain students selected by the workers’ unions. The number of postsecondary students dropped from 674,400 to 47,800 (below 1 percent of 18–21 year-olds). During this period, many teachers and intellectuals also suffered violence from the workers’ unions and were forced to quit. Take one medical college of the Ministry of Public Health, for example: over 500 of the total of 674 professors and associated professors were framed and persecuted.² Higher education was restricted for political purposes, and the decline in educational quality was profound (Liu 2009).

2.2 Higher education in transition

With the implementation of the “open-door policy” in the 1970s, Premier Deng Xiaoping proclaimed a reorientation of higher education to meet the needs of modernization. He first revived the National Higher Education Entrance Examination (gaokao) in 1977, a national test
still taken across the country on the same day by high school graduates and the sole basis for admission to universities. The “Decision on Reform of the Education System”, launched in 1985 by the Chinese Communist Party, was seen as a milestone of the reform era through its emphasis on the importance of higher education in China’s independent scientific and technological development, and in the solving of major theoretical and practical problems in the process of modernization. Teaching and research were then both emphasized in universities (Liu 2009). In 1992, another key policy, “Points Regarding How to Expedite Reforms and Vigorously Develop General Higher Education”, was issued by the State Education Commission, which indicated that higher education institutions should be “autonomous entities”, and private and enterprise-run educational institutions were permitted to be built. The “Outline for Education Reform and Development in China”, issued in 1993, encouraged competition between universities and further accelerated the process of decentralization, marketization, diversification of management, and financing of higher education.

As the reforms picked up pace, Chinese higher education developed rapidly. In 2014, the number of Chinese National Higher Institutions reached 2,824, including 2,529 National General colleges and universities and 295 adult higher institutions, and the number of college students, including undergraduate, master’s and PhD students, rose to 34.89 million in 2014. More than 377,000 foreign students from 203 countries or regions enrolled in over 775 Chinese universities and other institutions in 2014. In addition, the number of Chinese students overseas increased to 459,800 in the same year.

Although the reform indicated that higher education should respond to the demand for human resources in Chinese national development, a centralized and hierarchical educational system resulted, as shown in Figure 11.1, where the Ministry of Education controlled all higher education institutions through policy-making, legislation, planning, funding, and evaluation. According to the ownership-based categories of HEIs in China, higher education can be divided into state-owned and non-state-owned entities. State-owned HEIs include Regular HEIs, independent institutions, higher vocational colleges and adult HEIs (Minban Colleges) (Zhu and Lou 2011). These institutions can also be divided into several types including “multiversities” (e.g., Peking University, a familiar “university” across all disciplines), science and technology universities, normal colleges (i.e. higher education for those going into teaching), financial universities, art colleges and so on. According to the particular missions involved, the Chinese higher education system can be divided into four levels: research-based universities, whose main mission is to do scientific research and cultivate high-level scientific manpower (i.e., postgraduate education); teaching and research-based universities, which pay the same attention to cultivating talent as to doing scientific research; teaching-based colleges, focusing on undergraduate education; and vocational-technical colleges, which mainly train technicians and workers (Han and Guo 2015).

In this system, all universities are placed in a steep hierarchy, which developed gradually through the national programs. In 1999, the 985 Project, which was intended to develop a number of Chinese universities into world-class universities, was launched. Universities selected for this project could obtain substantial support, including financial support, from the Education Ministry, and were given more autonomy in their management. Thirty-nine universities were selected for this project. These universities are now considered the top universities. In 1995, the 211 Project, which attempted to build around 100 quality universities, was launched. Up to now there have been 112 universities selected for this project. These universities are also given priority in terms of financial and other resources. Although the 985 Project universities are included in the 211 Project lists, they can still get access to additional resources and are given priority. All of the 985 and 211 Project universities are public. As well as being differentiated according to their 985 or 211 Project categorization, universities are
Changes in Chinese higher education

Figure 11.1 The planning system for Chinese higher education recruitment
Source: Huang (2005)

also designated as first-level, second-level, or third-level universities for student recruitment, reflecting the order of their prioritization. This difference in recruiting students also reinforces the concepts of the hierarchical university system. Almost all first- and second-level universities are public universities.

Different from private universities in the Western world, China’s private education institutions are in the initial stage of development and are intended to complement public universities in order to meet the needs of those who fail their college entrance examinations or who cannot afford the fees to study abroad. Few private universities and colleges can gain as much prestige as public institutions. Most of them lack financial support, and their degrees are not acknowledged in some local government bureaucratic systems. In addition to the institutional barriers, the culture that “academic knowledge is more elegant than technology” also inhibits young people and their families from selecting private education institutions, which tend to focus on vocational and operational training. Only when they cannot succeed in gaining admittance to public institutes do Chinese students choose private institutes, which also have higher tuition fees (Han and Guo 2015). Overall, the private HEIs exist in an awkward position.

3 Chinese higher education in the globalization process

3.1 Pressure for world-class universities

Since the late 1990s, China has been more and more involved in global competition in many aspects. Global competition is used as a policy instrument, and being “world-class” with regard to universities has become a signifier of national productivity, power and prestige (Hazelkorn 2008). The development of world-class universities and disciplines is now of great importance to the Chinese government. Chinese President Jiang Zemin declared that “China must have a number of first-rate universities of international advanced level”. The Academic Ranking of
World Universities (ARWU, also called the Shanghai Jiaotong ranking) was instituted in China in 2003 by the Center for World-Class Universities and Institute of Higher Education of the Shanghai Jiao Tong University. The ARWU was initially created to benchmark Chinese universities against others worldwide (Amsler and Bolsmann 2012). Such a ranking mechanism is both a result and a driver of further competition in the global higher education market (Portnoi and Bagley 2011), driven by the promise that highly ranked institutions could enjoy benefits such as increased funding and student enrollment (Amsler and Bolsmann 2012).

Entering the 21st century, Chinese research universities tended to be keener on joining the ranks of world-class universities than when the 985 and 211 Projects were initially started. To participate actively in this global competition and to restructure the higher education system, a series of reform measures was conducted in China. In 2010, a National “Outline for Medium- and Long-term Education Reform and Development (2010–20)” statement was issued to shape the country’s education system for the next ten years, which put great emphasis on the improvement of higher education competitiveness. It stressed that “The international status, influence and competitiveness of our country’s education should be promoted. We must cultivate a large number of talents with international vision, familiar with international rules, able to participate in international affairs and competitions.”

With the aim of transforming the university system into an image of “world-class” higher education, in 2015 the State Council of China formally issued “The Overall Plan to Promote the Development of World-Class Universities and Disciplines”. This was aimed at developing a number of world-class universities and leading disciplines to make China a powerful country in higher education by 2050. Great importance is therefore attached to HEIs’ performance evaluations and the reform of education management systems in building a competitive framework for HEIs.

In the world academic university rankings published by Shanghai Jiaotong University in 2015, there are four Chinese universities in the top 150: Peking University, Shanghai Jiaotong University, Tsinghua University and Zhejiang University. Recently, in 2016, U.S. News released the “Best Global Universities Rankings”, in which Peking University, Tsinghua University, Fudan University and Shanghai Jiaotong University ranked 25th, 41st, 59th and 96th, respectively. The QS World University Discipline Ranking (evaluated by research publications and graduates’ employment competitiveness) in 2016 showed that five disciplines in China have entered the world top ten. In particular, Tsinghua University ranked first in the world in engineering. However, it is still noted that compared to some powerful higher education nations like the U.S., there is still a big gap.

### 3.2 The increasing importance of research

With the intention of performing well in global university competitions, universities in many nations adopt different measures to enhance their competitiveness. Knowledge and knowledge production have been seen as a kind of national competitiveness, leading both governments and HEIs to place increased emphasis on building research capacity for human capital development and national economic advancement (Rizvi and Lingard 2009). The primacy of research is grounded in day-to-day practices for the research universities, supplying the material know-how and symbolic capital that help keep them at the “cutting edge” (Bagley and Portnoi 2014).

This emphasis on research has intensified in the 21st century, when international position-seeking has become more systemic with the appearance of a number of ranking systems. Rankings are often based on visible and measurable variables such as publications, grants, applications for doctoral studies, etc., which are often related to the output of researchers and
Changes in Chinese higher education

Higher education institutions participating in the global market have to give a high priority to international rankings nowadays, as these have the capacity to enhance their reputation and increase their competitiveness in student enrollment, research funding and academic staff recruitment. Indicators of educational attainment in terms of citations and publication of papers feed directly into annual performance indicators for universities and their faculties in an ongoing process that goes substantially beyond the tenure-for-life system.

Since developing world-class universities has been regarded as a national priority, Chinese higher education institutions are now subject to extraordinary pressures to upgrade themselves in terms of quantitative evaluations and rankings, and research capacity is gaining more importance in performance evaluations. To some extent, the emphasis on research in Chinese universities may be more intense than their international partners, and this is supported by examining the ARWU. The emphasis of the ARWU is on institutional reputation and research performance as measured in a quantifiable way rather than on localized student needs (Marginson 2007). Scores are calculated through “objective indicators”, which include the numbers of Nobel Prize and Fields Medal winners, Thomson Reuters highly cited researchers, articles published in Nature and Science, articles indexed in the Science and Social Sciences citation indices, and performance in relation to the size of the institution (Amsler and Bolsmann 2012). The ARWU relies on Thomson Reuters for much of its data, but does not include teaching, learning and subjective experiences (Marginson 2007). It is very clear that these indicators are very selective and favorable to those universities which have strong science and technology programs and have the capacity to publish in English-language publications.

Rather than competing for international students in the global market, Chinese universities actually place top priority on gaining research funding from the government, which is substantial, especially in fields of key importance to national-level development priorities as defined by the government. In other words, their participation in global competition is more a result of the national top-down process than from pressure for marketization, as HEI research capacity has been given great importance by the state to build world-class universities and disciplines. Special funds are to be provided by central government, and their allocation will be more performance-oriented, as indicated in the “Overall Plan to Promote the Development of World-Class Universities and Disciplines”. However, due to the hierarchical system of Chinese higher education, state-owned HEIs, particularly the elite universities, have more resources and always maintain an advantageous position in these processes. This has led to the increasing gap between different institutions, and consequently resources and opportunities for students, which will be discussed in the following section.

### 3.3 The increasing gap between different institutions

Participating in the global education market and emphasizing research has led to an increasing gap between different institutions in several aspects, such as funding, faculties’ priorities, and the structure of academic programs. In the Chinese public higher education system, the number of first-level colleges and universities accounts for about 6 percent of all regular HEIs, and these HEIs have 32 percent of the country’s undergraduate students, 69 percent of master’s students, and 84 percent of doctoral students, sharing 72 percent of the country’s scientific research funds and 54 percent of the instruments and equipment, and covering 96 percent of the country’s state key laboratories and 85 percent of the nation’s key disciplines (Fei 2007).

The majority of Chinese universities are state-owned, and financial support from the government, in most cases, decides each university’s development, varying dramatically among
different universities. There are special funds limited to the 112 affiliated universities of Project 211 approved by the Ministry of Education, while the rest, totaling approximately 2,000 local colleges and universities, are excluded from this system (Fei 2007). According to the data from the PRC Ministry of Education for 2009 to 2013, the total government research funding for 39 Project 985 institutions was 13.9 billion RMB, with 73 Project 211 institutions at approximately 5.1 billion RMB, and the rest, 670 regular undergraduate colleges, at only 7.9 billion RMB. Among the Project 985 universities, Peking University and Tsinghua University got the highest funding, at 1.8 billion RMB in the first phase, while Chinese Ocean University only received 300 million RMB, one-sixth of the other two (Liu 2015). In 2013, Tsinghua University had a total budget of 3.031 billion RMB for scientific research, with government funding comprising 2.775 billion of that, accounting for about 91.5 percent. By contrast, China Southwest Petroleum University obtained 460 million RMB, which was the highest among regular universities (i.e., non-Project 211), including 120 million RMB of government funding, which accounted for 26.1 percent (Liu, 2015). This means that Tsinghua University received 23 times the funding that China Southwest Petroleum University did. This unbalanced distribution in funding deepens the gap between Project 211 universities and regular public universities, as well as the gaps between Project 211 universities themselves. Institutes at higher levels do not have to be anxious about funding because they can obtain generous funds from the government and also produce revenues through their own endeavors, while institutes at lower levels usually fall into the dilemma of having insufficient funds, which hinders their development (Han and Guo 2015). As for private universities, funding for them depends largely on students’ tuition fees, which often leaves them short of money, making their development even more difficult.

Administered by the Ministry of Education, the colleges and universities of Project 211 and Project 985 form an elite that is favored in the selection of students via the college entrance examinations (the *gaokao*), and effectively gain a monopoly on the enrollment of top students. When students are enrolled in higher-ranked universities, they also enjoy stronger national financial support, preferential government policies and more abundant school resources, and are thus able to access better living conditions, more advanced scientific instruments, more comfortable working environments, and more exchange opportunities for international learning, which in turn helps in attracting excellent teachers and better-known professors. With these great advantages, elite universities usually have higher research performance and attract brighter students, and therefore accumulate prestige which is further leveraged to raise public and private monies to hire highly paid faculty and sustain their research programs.

In this process, universities and students develop into a closed circle of a mutually beneficial community. Universities as producers compete for “preferred customers”, i.e., students with the highest entry scores; and students, as the customers, compete for entry to preferred institutions (Amsler and Bolsmann 2012). The bigger the distance between elite universities and the others, the more society values those elite universities, which is the logic of a winner-take-all market (Frank 2001). In other words, the prestige of universities at higher levels sustains high student scores, contributing to better graduation outcomes and the maintenance of good reputations, which in turn strengthens their dominant positions and leads to a reinforcement of the hierarchy (Amsler and Bolsmann 2012). This reinforcing effect is further exaggerated in the Chinese social system, wherein the social mobility of university graduates remains inflexible, a situation which will be discussed in the following section. The outcome of this process is a steep pyramidal system that generates intense pressure among both career academics and prospective students in order to support the international rankings of a handful of elite universities.
3.4 Social mobility of graduates

The role of education in promoting social mobility is among the central issues in contemporary sociological and political debates (Iannelli and Paterson 2005). In modern societies, education has become an increasingly important factor in determining which jobs people enter and in determining their social class, and has been considered to be the easiest and most popular avenue for upward mobility (Mulligan 1952). A nation’s colleges and universities are expected to promote the goal of social mobility in order to make it possible for anyone with ability and motivation to succeed (Zhang and Hao 2006). However, the situation in China has become far more complex, as social mobility in general has slowed down (Mok and Wu 2016). People from wealthier families and the upper classes have more opportunities to receive a quality higher education, causing social class solidification to be strengthened to a high degree (Liu and Liu 2013). Indeed, higher education in China is increasingly a vehicle of entrenched social privilege rather than of social mobility and meritocracy. Thus, the ranking system has begun to show profound impacts on students’ mobility. Students who are in 211 Project universities get more chances to be enrolled in graduate programs and to obtain scholarships to study abroad. Employers think more highly of students from Project 211 universities than they do of those from provincial colleges. Some job advisement clearly indicate that they only consider those who have graduated from Project 985 universities. Meanwhile, according to the investigation on university graduate employment (Report on college graduates’ employment investigation, 2015), graduates from Project 211 universities (including Project 985) get the highest average starting salary (5,571 RMB), while graduates from Regular HEIs earn 3,944 RMB, and the starting salary of those from Higher Vocational Colleges (2,597 RMB) and Minban colleges and independent institutions (2,993 RMB) is much lower. These barriers for social mobility from the university system create great pressure on Chinese families to be engaged in strenuous competition in their children’s education from the time they are very young.

Faced with such a situation, getting admission to a high-level university is seen by most families as access to a better employment in the future for their children, leading to both students and parents working hard for the gaokao. As a result, families have to find extra resources to enable their children to be enrolled in good kindergartens, premier schools and high schools. That is to say, higher-income parents can make enormous efforts toward ensuring their children’s academic success, while children of poorer parents begin the “college education game” later and with fewer resources. This process begins from early childhood, and depends upon the parents’ financial resources – e.g., to be able to afford apartments in catchment areas for the best schools in major cities (where the best universities are located, with admissions skewed to city residents), an intensely competitive and increasingly expensive process.

Xie and Wang (2006) conducted a survey and found there is a gap in the recruitment opportunities for the rich classes (representing 9.3 percent of the national population) and the low-income classes (representing 76.4 percent of the national population). Students from high-income families are 4–18 times more likely than students from low-income families to attend HEIs directly financed by the MoE, which are normally 211 Project universities.

Since the rapid expansion of higher education in the late 1990s, the proportion of rural students in Chinese key universities has been also falling. In Peking University, the proportion of rural students fell from 30 percent to 10 percent; and in Tsinghua University, only 17 percent of students in 2010 were from rural areas, although rural students accounted for 62 percent of the candidates participating in the gaokao that year (Liu and Liu 2013). This phenomenon is becoming more and more obvious in HEIs, particularly in elite universities. In 2011, an article entitled “Poor children have no bright prospect? Why are they moving further away from the first-level colleges and universities?” sparked a nationwide discussion about the impact of class gaps on the...
fairness of education in China. The reporter conducted interviews and investigations into the phenomenon of there being fewer and fewer rural students in elite universities, and commented that “the lower the class the youth is from, the lower the quality of the university he is admitted to”, a trend that is intensifying and being solidified. “The better the family background, the more opportunities to find a job, to pursue further study, and the higher the starting salary”. Overall, ranking HEIs reinforce the disparity among students with different family backgrounds.

Ironically, however, it is not clear that this cycle of privilege through elite universities necessarily produces the best qualified graduates, even from the best universities. Since it is primarily admission to a high-level university that makes the difference to one’s job prospects, not the degree class of the resulting degree, many staff at these universities complain that their students work themselves extremely hard for the gaokao, but then, if admitted to a top university, do not apply themselves to their degree. This is compounded by pressure on the staff to pass them so as not to harm the university’s reputation. Moreover, anecdotal evidence suggests a gender bias in this regard, with male students in particular not working hard once admitted, but instead spending their time busily forging social connections (or guanxi) or accumulating the work experience needed to get the best jobs on graduation. This leads to the second issue we consider here, regarding gender inequalities.

3.5 Gender issues in higher education

The effects of these far-reaching reforms on Chinese higher education (and broader political economy and society) as regards gender equality are complex, but largely regressive. On the one hand, the greater access to higher education in the past decade has resulted in a growing number of women obtaining degrees and entering professional fields, and education opportunities for women have been very much improved. This may be due to the one-child policy in cities, and to parents’ tendency to strive for the best education for their children. However, once these young female researchers begin their academic careers at universities or research institutions, the increasing pressure in the academic world for research has brought additional barriers for them in obtaining the same status as men.

According to data from the PRC Ministry of Education, in the last ten years the percentage of female students in undergraduate, master’s and doctoral programs has been steadily increasing. The number of female master’s students exceeded that of males in 2010, and in 2011 female undergraduate students also outnumbered males. Also, while male students at the postgraduate level still remain the majority, the number of female postgraduate students is increasing year by year, and the gap is being narrowed.

Table 11.1 Number of students in different programs in 2004 and 2014

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>312,676</td>
<td>165,600</td>
<td>1,535,013</td>
<td>654,300</td>
<td>15,410,653</td>
<td>7,378,500</td>
</tr>
<tr>
<td>Female</td>
<td>115,459</td>
<td>(36.93%)</td>
<td>792,828</td>
<td>(51.65%)</td>
<td>8,084,728</td>
<td>(52.46%)</td>
</tr>
<tr>
<td>Male</td>
<td>197,217</td>
<td>(63.07%)</td>
<td>742,185</td>
<td>(48.35%)</td>
<td>7,325,925</td>
<td>(47.54%)</td>
</tr>
</tbody>
</table>

Sources: Education Statistical Yearbook of China, 2005 and 2015
The number of female teachers has been growing at a faster rate than that of males. In higher vocational colleges, female teachers exceeded males in 2011, and in independent institutions female teachers outnumbered males in 2014. However, although the gap is being narrowed, females are still a minority in HEIs offering degree programs at higher levels.

Although the proportion of female teachers in HEIs is rising rapidly, their male colleagues still dominate in terms of professional titles. The higher the professional title, the fewer the number of females, with the lowest rate being female professors (senior) (see Table 11.3). Female teachers with mid-level titles outnumber males, and teachers with low-level or no titles are still mainly women.

A similar situation appears with regard to post-graduate supervisors. From 2003 to 2013, the percentage of female supervisors increased, but the overall difference between numbers of females and males became larger (see Table 11.4). Men still play the dominant role in higher education, and the gap in elite universities is even more severe. Based on the statistics up to 2006 for male and female supervisors (master’s and PhD) for 37 Project 985 universities, the percentage of female supervisors in Jilin University was the highest, at 30.83 percent, and the lowest was East China Normal University, at 14.38 percent. In the highest-level universities in China, over half had less than 20 percent female supervisors. In terms of high-level leadership, according to research conducted in 2013, there were only 45 female leaders among 38 Project 985 universities, accounting for less than 10 percent of the total number (Wang et al. 2014). Most of them were deputy leaders, and 42 of them were ten years or more older than the average age of the universities’ presidents (Wang et al. 2014).

### Table 11.2 Number of teachers in different kinds of regular HEIs

<table>
<thead>
<tr>
<th>HEI</th>
<th>HEIs Offering Degree Programs</th>
<th>Independent Institutions</th>
<th>Higher Vocational Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1,091,645</td>
<td>575,300</td>
<td>136,303</td>
</tr>
<tr>
<td>Female</td>
<td>509,163</td>
<td>236,800</td>
<td>68,945</td>
</tr>
<tr>
<td>(46.64%)</td>
<td>(41.17%)</td>
<td>(50.58%)</td>
<td>(43.17%)</td>
</tr>
<tr>
<td>Male</td>
<td>582,482</td>
<td>338,500</td>
<td>67,358</td>
</tr>
<tr>
<td>(53.36%)</td>
<td>(58.83%)</td>
<td>(49.42%)</td>
<td>(56.83%)</td>
</tr>
</tbody>
</table>

**Sources:** Education Statistical Yearbook of China, 2005 and 2015

### Table 11.3 Number of full-time teachers and their titles in HEIs in 2014

<table>
<thead>
<tr>
<th>Total</th>
<th>Senior</th>
<th>Sub-senior</th>
<th>Middle</th>
<th>Junior</th>
<th>No-ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1,566,048</td>
<td>190,528</td>
<td>458,388</td>
<td>627,233</td>
<td>201,440</td>
</tr>
<tr>
<td>Female</td>
<td>755,423</td>
<td>56,219</td>
<td>203,953</td>
<td>333,144</td>
<td>114,475</td>
</tr>
<tr>
<td>(48.24%)</td>
<td>(29.51%)</td>
<td>(44.49%)</td>
<td>(53.11%)</td>
<td>(56.83%)</td>
<td>(53.85%)</td>
</tr>
<tr>
<td>Male</td>
<td>810,625</td>
<td>134,309</td>
<td>254,435</td>
<td>294,089</td>
<td>86,965</td>
</tr>
<tr>
<td>(51.76%)</td>
<td>(70.49%)</td>
<td>(55.51%)</td>
<td>(46.89%)</td>
<td>(43.17%)</td>
<td>(46.15%)</td>
</tr>
</tbody>
</table>

**Source:** Education Statistical Yearbook of China, 2015
Table 11.4 Number of post-undergraduate supervisors in 2003 and 2013

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>150,798</td>
<td>128,652</td>
</tr>
<tr>
<td>Female</td>
<td>31,472 (20.87%)</td>
<td>25,651 (19.94%)</td>
</tr>
<tr>
<td>Male</td>
<td>119,326 (79.13%)</td>
<td>103,001 (80.06%)</td>
</tr>
<tr>
<td>Doctoral Supervisors</td>
<td>11,065</td>
<td>10,620</td>
</tr>
<tr>
<td>Female</td>
<td>1,141 (10.31%)</td>
<td>1,104 (10.40%)</td>
</tr>
<tr>
<td>Male</td>
<td>9,924 (89.69%)</td>
<td>9,516 (89.60%)</td>
</tr>
<tr>
<td>Master’s Supervisors</td>
<td>115,774</td>
<td>99,727</td>
</tr>
<tr>
<td>Female</td>
<td>27,876 (24.08%)</td>
<td>22,721 (22.78%)</td>
</tr>
<tr>
<td>Male</td>
<td>87,898 (75.92%)</td>
<td>77,006 (27.28%)</td>
</tr>
<tr>
<td>Doctoral and Master’s Supervisors</td>
<td>23,959</td>
<td>18,305</td>
</tr>
<tr>
<td>Female</td>
<td>2,455 (10.25%)</td>
<td>1,826 (9.98%)</td>
</tr>
<tr>
<td>Male</td>
<td>21,504 (89.75%)</td>
<td>16,479 (90.02%)</td>
</tr>
</tbody>
</table>

Sources: Education Statistical Yearbook of China, 2004 and 2014

The above analysis shows that although Chinese females have made significant gains in education at all levels because of expanding enrollment, they are still under-represented in higher education, especially in the senior, more influential levels of the university hierarchy. Few women presidents exist in Chinese universities, and most department leaders are male. While, culturally, male bias puts women at a disadvantage for promotion to higher management and for participation at the higher levels of the bureaucracy or leadership, the evaluation criteria, which emphasize competition and research, have also hampered young women. Since the time for research for Chinese academics often requires incursions into their leisure time, and women are generally still burdened with more family responsibilities (including to in-laws) given prevailing gender norms, the time that women academics can devote to research, bid for funds and publish is comparably less than their male counterparts. As a result, women generally perform less well than men in terms of these indicators and are in a weak position promotion-wise compared to their male colleagues. Consider the field of tourism as an example. Tourism is a subject in which there is a high percentage of female researchers. However, when searching the CNKI (China National Knowledge Internet, an important database containing e-journals, newspapers, dissertations, proceedings, yearbooks, reference works, etc.) for papers published in the *Tourism Tribune* (the best domestic journal in this area) from 1986 to 31 January 2016, it was found that there were only six females in the top forty scholars in terms of publications, and that the top ten were all men.13

As Chinese HE becomes an ever-steeper pyramid, all the intense competition that has come with it has created a system characterized by an ever-growing army of surplus academic labor which is predominantly female in the low-paying and junior-level jobs, and relatively few men who will continue to dominate the ranks of the few elite winners that the system is explicitly designed to produce.

4 Conclusions

Since the implementation of the “Reform and Opening-up” policies, a series of reforms has been conducted to move the higher education sector from a unified, centralized and closed
system to one that allows openness and diversification. Development of higher education has met with considerable success, and Chinese higher education has experienced a great expansion. Especially in recent years, various universities have ceaselessly expanded enrollment and have constructed new campuses for higher education. The proportion of China’s college-age population in higher education has now increased to over 20 percent, from 1.4 percent in 1978.

With China’s growing exposure to international competition and the world-class university movement, the state has taken it as a national priority to develop a few top universities to rise above the waters into the “sunshine” of a global reputation. However, the continuing strong control by the central state over the HE sector has made the pyramid system even deeper, as the apex of the Chinese HE pyramid gets ranked highly under the effect of government policy committed to intense concentration of resources. The consequent disadvantages of this strong competition and ranking are worrisome. The overemphasis on competition and rankings may damage the very essence of Chinese universities, which is to improve social equality through education. This concern is being raised in Chinese society now, since social equity is now considered a priority issue. However, whether, and how, balance can be achieved between providing an equal opportunity to all and supporting “excellence” is still far from certain.

Notes

1 Data source: China Statistical Yearbook 1985, Beijing.
3 Data source: China Education Yearbook, 2015.
4 Data source: China Education Yearbook, 2015.
7 www.jybj.cn/high/sjets/201604/t20160407_656711.html.
8 www.jybj.cn/high/sjets/201604/t20160407_656711.html.
11 www.infzm.com/content/61888.

References


