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HIGHER EDUCATION REFORM IN CHINA AND INDIA: THE ROLE OF THE STATE

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# HIGHER EDUCATION REFORM IN CHINA AND INDIA: THE ROLE OF THE STATE

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Paper for volume on

The Changing Role of the State in Asia:

**Comparative Perspectives** 

January 2015

The quality of a country's system of higher education is a gauge of its current level of national development as well as a bellwether of future economic progress. It is therefore natural that the much ballyhooed "rise" of China and India should generate interest in the condition of their colleges and universities. A number of comparative questions merit investigation: Do these countries' long histories of higher education pose a benefit or a barrier to meeting contemporary demands? Are their current systems of higher education suited to the "knowledge economy" of the twenty-first century, and able to drive innovation, economic growth and national competitiveness? What roles do the Chinese and Indian states play in creating "world-class" universities capable of spurring and sustaining further intellectual and industrial development? Can these academic and economic goals be pursued without collateral damage to other valued goals of social equity and political stability?

The answers to these questions lie within broader and perhaps more fundamental questions about the role and purposes of higher education. How do universities reflect and remake conceptions of citizenship? Is the goal of higher education to create national elites or provide a ladder for social mobility? To influence and mold the minds of young people? To train people for a labor force or train a labor force that is in turn trainable by employers? To create a middle class – the accountants, doctors, engineers, lawyers, scientists, teachers – who will in turn build the institutions which are foundational to nation building? How does the allocation of resources across academic disciplines (among professional education, basic sciences or liberal arts) affect the content of higher education and thereby the sensibilities of the burgeoning middle-class to become either a conservative brake or a progressive force for social and political change? Does "massification" inevitably imply trade-offs between cost and quality, with elite universities simply reproducing existing social hierarchies?

Recent higher education reforms in China and India, backed by impressive increases in state spending (especially in the former) and expanded college enrollments, indicate that governments in both countries recognize the importance of tertiary education for promoting national development. In both cases, moreover, state development goals explicitly embrace a concern for social equity as well as economic growth. Despite such striking similarities in intent, the Chinese and Indian patterns of higher education reform have diverged markedly. "Communist" China, ironically enough, has shown a far greater willingness to sacrifice egalitarian ideals in the pursuit of globally competitive universities than has its democratic neighbor. Political factors account for much of the difference, but in ways that challenge conventional assumptions about the influence of regime type on educational policy.

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#### Historical Background

Both India and China are renowned for ancient traditions of higher education – heavily ethical in orientation – that were, however, as elitist and as they were illustrious. In imperial China, higher learning (limited for the most part to males from affluent families) constituted a key pillar of state power, institutionalized through competitive Confucian examinations. Qiang Zha explains,

> Ever since the Han dynasty, formal institutions of scholarship had been a part of the structure of imperial rule, and a system of written examinations was gradually developed, which opened up an opportunity for young men to compete for positions in the imperial bureaucracy. Higher learning was thus a formalized part of the state system of rule, and those selected through these examinations were given positions of great responsibility on a meritocratic basis.<sup>1</sup>

By socializing and selecting bright, ambitious young men for government service, higher education in imperial China constituted a cornerstone of political strength and stability that helped to sustain the system for centuries.<sup>2</sup> Although few poor families could actually afford the education required to succeed in the imperial examinations, the fact that examinees were not restricted by birth or class background endowed the system with an unusual degree of popular legitimacy. Chinese imperial rule was justified on the basis of what historian Joseph Levenson termed "culturalism," or a belief in the superiority and universality of Confucian values and practices imparted through a classical education. The promise of Confucian culturalism was not confined to the Sinic world; non-Chinese could also gain membership in this higher civilization so long as they learned to read literary Chinese and were properly educated in the Confucian classics.<sup>3</sup> To be "cultured" (有文化) meant to be educated, to have been transformed (化) through mastery of written Chinese (文) and its Confucian ethos.

It is easy enough to point to similarities between past and present. The contemporary PRC, like imperial China, displays particular concern for higher education as both a pillar of state strength and a purveyor of social morality. Its officials are required to attain advanced academic degrees and to pass competitive civil service examinations. Its hundreds of Confucius Institutes around the world offer instruction in Chinese language and culture as an advertisement for the universal appeal of Chinese

<sup>&</sup>lt;sup>1</sup> Qiang Zha, "Understanding China's Move to Mass Higher Education from a Policy Perspective," in Ruth Hayhoe et.al., eds., *Portraits of 21<sup>st</sup> Century Universities: In the Move to Mass Higher Education* (Hong Kong: University of Hong Kong, 2011): 21.

<sup>&</sup>lt;sup>2</sup> Benjamin A. Elman, *A Cultural History of Civil Examinations in Late Imperial China* (Berkeley, CA: University of California Press, 2000); Benjamin A. Elman, *Civil Examinations and Meritocracy in Late Imperial China* (Cambridge, MA: Harvard University Press, 2013).

<sup>&</sup>lt;sup>3</sup> Joseph R. Levenson, *Confucian China and its Modern Fate* (Berkeley: University of California Press, 1965).

values. In short, higher education continues to function as an important element of statecraft. But contemporary state practices are far from an uninterrupted or organic outgrowth of traditional patterns; rather, they represent a deliberate effort (led by the Central Propaganda Department) to legitimize Communist rule through cultural governance.<sup>4</sup> The gulf separating China's Confucian past from its Communist present is, as Levenson argued, vast.

In the early twentieth century, the introduction of alien ideas from abroad (through the founding of Christian schools by American and European missionaries, among other channels) undermined the authority of the *ancien regime* and encouraged revolutionary change.<sup>5</sup> The early leaders of the Chinese Communist Party, including Mao Zedong, were intellectuals who had been radicalized in large part by their exposure to Western learning.<sup>6</sup> Their revolution, in turn, featured new forms of education – night schools for workers, part-time schools for peasants, party schools for cadres – designed to instill new "socialist" values in the course of literacy instruction.

In contrast, education in India had historically served a more ecclesiastical and exclusionary function. The historical weakness of the state in India meant that education was largely a private enterprise with limited state support. The learning traditions were oral, centered around the memorization of sacred texts. Women and lower castes were excluded. While evidence is fragmentary about education in ancient and medieval India, several of the large monasteries and temple schools became centers of higher education (what one might call universities today) with those at Taxila, Nalanda and Vikramshila the most prominent.<sup>7</sup> Subsequently seven centuries of Islamic rule led to the demise of most centers of Brahamanical and Buddhist learning especially across North India.

There is fragmentary evidence of diverse beliefs and practices rooted in Indian's rich and multiple religious traditions before the arrival of the British in India. But as with most matters associated with colonial rule, education in colonial India is a contentious subject in Indian historiography. By the mid-nineteenth century a colonial higher education system began to emerge. It was designed to serve the colonial state and not foment any larger changes in society. It developed an exam system that created India's own mandarins, its elite civil service. But as the historian Bernard Kohn points out, "the

<sup>&</sup>lt;sup>4</sup> Elizabeth J. Perry, "Cultural Governance in Contemporary China: 'Re-Orienting' Party Propaganda," *Harvard-Yenching Institute Working Papers* (2013).

<sup>&</sup>lt;sup>5</sup> Jessie Gregory Lutz, *China and the Christian Colleges, 1850-1950* (Ithaca: Cornell University Press, 1971); Wenhsin Yeh, *The Alienated Academy: Culture and Politics in Republican China, 1919-1937* (Cambridge: Harvard University Press, 1990); Daniel H. Bays and Ellen Widmer, eds., *China's Christian Colleges: Cross-Cultural Connections, 1900-1950* (Stanford: Stanford University Press, 2009).

<sup>&</sup>lt;sup>6</sup> Mao describes the impact of "new learning" on his political awakening in Edgar Snow, *Red Star Over China* (New York: Bantam Books, 1972).

<sup>&</sup>lt;sup>7</sup> Hartmut Scharfe, *Education in Ancient India* (Leiden: BRILL, 2002).

conquest of India was a conquest of knowledge" and the result was the collapse of indigenous education systems symbolized the shift in the language of instruction as English gradually replaced both classical and vernacular Indian languages.<sup>8</sup>

In China, after the victory of the revolution the Communist authorities moved swiftly to revamp higher education so that it might once again serve to support rather than subvert political authority. Soon after the establishment of the PRC in 1949, the new government abolished all private colleges and universities (religious and secular alike) and implemented a Soviet-style system of specialized academies and institutes under tight Communist Party control. The only significant deviations from Soviet practice occurred when Mao Zedong personally intervened in educational policy, embracing initiatives intended to blur the distinction between "red" and "expert" and to reduce inequalities between city and countryside and among social classes.<sup>9</sup> On a well-publicized visit to Tianjin University in 1958, Mao called for a new model of higher education to underpin his Great Leap Forward that would combine firm party committee leadership with "mass line" practice and a blending of education and productive labor. Schools were to run factories and factories to run schools. This radical style of pedagogy was supposed to become universal within fifteen years; to accommodate increased enrollments, the number of institutions of "higher education" jumped from 229 to 1,289 in the space of three years. In subsequent pronouncements before and during the Cultural Revolution (1966-76), Mao made clear that these institutions should focus on political education for worker-peasant students. Hands-on knowledge of "class struggle" was deemed more valuable than academic or professional training.<sup>10</sup> Most institutions of higher education ceased to function as such for much of the Cultural Revolution decade.

Only after Mao's death in 1976 did Deng Xiaoping and his colleagues show renewed interest in Western models of higher education as a source of alternative institutional and instructional forms that might better facilitate their ambitious reform agenda. At the 12<sup>th</sup> National Party Congress in 1982, General Secretary Hu Yaobang pointed to the expansion and improvement of higher education (especially in science and technology) as essential to the country's strategy of economic modernization.<sup>11</sup> As had been the case before the Communist revolution, American and European universities were again regarded as a prototype for Chinese emulation.

<sup>&</sup>lt;sup>8</sup> Bernard Kohn, *Colonialism and Its Forms of Knowledge: The British in India* (Princeton, NJ: Princeton University Pres, 1996), 16.

<sup>&</sup>lt;sup>9</sup> Donald J. Munro, *The Concept of Man in Contemporary China* (Ann Arbor: University of Michigan, 1977).

<sup>&</sup>lt;sup>10</sup> Zhang Yingqiang, *Jingying yu dazhong: Zhongguo gaodeng jiaoyu 60nian* [Elite and mass: 60 years of Chinese higher education] (Hangzhou: Zhejiang University Press, 2009): 3-4.

<sup>&</sup>lt;sup>11</sup> Zhang Yingqiang, 2009: 33.

In India, as in China, modern universities were a Western import.<sup>12</sup> The first modern Indian universities were established in 1857 in the British "presidency" towns of Calcutta, Bombay and Madras as the colonial government looked to educate a class of Indians who could staff the growing bureaucracy. By 1882 India had four universities (with the addition of Punjab University in Lahore) and 67 colleges, which grew to 5 universities and 145 colleges, with 18,000 students (almost all male) by the turn of the century. While initially the colleges were founded by missionaries, those funded and managed by Indians were the majority by the turn of the century. The system was decentralized, with much of the funding from private Indian sources. By 1922 there were 14 universities and 167 colleges, with 46,000 students under the control of elected provincial authorities, with little role for the national government. In 1947, when India became independent, 21 universities and 496 colleges were in operation.

In fact, India had a larger number of secondary and post-secondary students than several industrialized countries such as France, even though primary school enrollment rates were among the lowest in the world. By 1931, India's literacy rate was a mere 8.6 percent although the small numbers of literates were highly educated. More than 10 per cent of them could read and write in English, a second language, even as the vast majority of the people could not read or write in any language, starkly illustrating the unequal nature of the education system.<sup>13</sup> India had the most Nobel prizes in Asia prior to independence (and while Indians continued to garner a disproportionate number of Nobel prizes in subsequent years, the latter-day Nobel laureates were all based abroad).

India's higher education needs to be understood in the context of its education policies in general. At the heart is the paradox of the undoubted success of democracy in India – exceptional in many ways among poor countries – combined with its weak record in human development. The political economy literature argues that democratic governments are more likely to invest in universal education than authoritarian ones. Since broad-based education is fundamentally redistributive, elites will tend to block (or at least limit) access to education to narrow segments.<sup>14</sup> And since autocracies are controlled by a narrower group of elites than democracies, the pressures to redistribute are less – and hence access to education is more limited. To put it simplistically universal franchise should lead to (near)

<sup>&</sup>lt;sup>12</sup> Philip G. Altbach observes that "[n]o Asian university is truly Asian in origin – all are based on European academic models and traditions." See Altbach, "The Past and Future of Asian Universities," in Philip G. Altbach and Toru Umaboshi, eds., *Asian Universities: Historical Perspectives and Contemporary Challenges* (Baltimore, MD: Johns Hopkins University Press, 2004): 15.

<sup>&</sup>lt;sup>13</sup> Latika Chaudhary, "Land revenues, schools and literacy: A historical examination of public and private funding of education," *Indian Economic and Social History Review*, 47 (2): 179-204, 2010.

<sup>&</sup>lt;sup>14</sup> Ben W. Ansell, *From the Ballot to the Blackboard. The Redistributive Political Economy of Education*. Cambridge Studies in Comparative Politics, 2010.

universal education, since the uneducated and poor have a voice. But India's record on basic education belies this prediction; authoritarian China has done far better at providing elementary education to its citizens. If India's "democratic exceptionalism" makes it an outlier so does its record on primary education, which in turn has consequences for understanding higher education in India.

Two reasons have been advanced to explain this paradoxical Indian outcome. The first stems from the social coalition that made up the Congress with upper castes linking up with the Scheduled castes and tribes and Muslims, the three largest marginalized communities in India. Together they account for nearly 40 percent of the country's population. The hierarchies of the caste system had given the upper castes a monopoly on learning, and they were loath to extend it to those at the bottom of India's social hierarchies. Instead they offered "reservations", or affirmative action in higher education and government jobs, which effectively bought off elites among the lower castes. "By managing to direct educational investment away from the masses," the educated elites were "able to protect their scarcity rent."<sup>15</sup> A second reason lay in India's post-independence import substitution industrialization (ISI) development strategy. The resulting closed economy led to a focus on secondary and higher education that could provide the necessary skills for ISI production or to run the growing Indian bureaucracy to manage a planned economy. India's trade strategy, it is argued, affected the size and composition of education spending.<sup>16</sup>

Meanwhile, thanks in part to Mao Zedong's promotion of rural education as a means of reducing social inequality and revolutionizing the countryside, the People's Republic of China provided basic schooling to the great majority of its citizens. Authoritarian politics proved to be no barrier to the extension of basic education. A population that in 1949 had been plagued by a worse illiteracy rate than India's, thirty years later could boast a nearly universal (albeit rudimentary) level of literacy.<sup>17</sup>

India started out with (in the first Plan in the early 1950s) some emphasis on primary education, but this dropped steadily in the next two decades (until the mid-1970s). Between the early 1950s and early 1970s, the share of higher education spending in India increased from a quarter to a third of the education budget, while spending on primary education dropped – precisely in the period when China was putting into place universal primary education. Even as most Chinese universities closed their doors during the Cultural Revolution of the late 1960s and early 1970s, the expansion of primary education continued. In India, by contrast, by the early 1970s as the economy languished unemployment among

<sup>&</sup>lt;sup>15</sup> Pranab Bardhan, *The Political Economy of Development in India*, Oxford: Oxford University Press, 1984: 52-53. <sup>16</sup> Ansell, 2010.

<sup>&</sup>lt;sup>17</sup> Glen Peterson, "State Literacy Ideologies and the Transformation of Rural China," *Australian Journal of Chinese Affairs*, no. 32 (July 1994): 95-120.

university graduates grew and was one of the drivers of social unrest and political turmoil during this period. As a result, for the next quarter century higher education spending and growth in India stagnated, and the gross enrollment ratio barely grew by 2-3 percent as India's economy remained closed (Figure 2a). A simulation study in 2000 to predict the demand for education if India became as open to trade as China, found that such an opening would increase the demand for primary education by 12 percent, for secondary education by 31 percent and for higher education by 64 percent.<sup>18</sup> By this time India had begun to integrate itself into the global economy and this period also marked the onset of "massification" of its higher education.

In India, the share of total government spending on education that is earmarked for higher education stands today at 18 percent. In China, the comparable statistic is a little over 20 percent. Total government spending on education amounts to 4.2% of GDP in India; in China, the figure is 4.3%. In both countries, much of the recent increase in public spending has come from the central government, but local governments still account for the lion's share of total education spending.<sup>19</sup> However, in contrast to China the "massification" of Indian higher education has resulted primarily from the immense expansion of the private sector.

#### Patterns of "Massification"

The second half of the twentieth century witnessed what has been called a "massification" of higher education across much of the globe, with the expansion of post-secondary school enrollments beyond elite circles to the population at large. The expansionary trend was pioneered in the United States (where 40 percent of the college-age cohort was enrolled in higher education in 1960), followed over the next two decades by Western Europe and Japan.<sup>20</sup> Fueled to some degree by a rising demand for higher education on the part of newly affluent middle classes, massification was also encouraged by national governments seeking to fuel economic growth.

By the end of the twentieth century, state-led massification of higher education had become a common pattern, popularized in large measure by the success of the East Asian development model.

<sup>19</sup> Ministry of Human Resource Development, "Analysis of budgeted expenditure on education 2009-10 to 2011-12," 2013; UNESCO Institute for Statistics, *UIS Statistics in Brief: Education Profile – China* (2012)

<sup>&</sup>lt;sup>18</sup> Adrian Wood and M. Calandrino . 2000 . " When the Other Giant Awakens: Trade and Human Resources in India ." *Economic and Political Weekly* XXXV (52-53): 4677-94.

<sup>&</sup>lt;sup>20</sup> Philip G. Altbach, "The Global Academic Revolution," *Journal of Educational Planning and Administration*, vol. 25, No. 4 (October 2011): 302-313. The seminal work on the phenomenon of massification is Martin A. Trow, *Problems in the Transition from Elite to Mass Higher Education* (Berkeley, CA: Carnegie Commission on Higher Education, 1973). Trow distinguishes among "elite" higher education, which enrolls under 15% of the eligible age cohort, "mass" education which enrolls 15-50%, and "universal" education which enrolls over 50%.

The political leaders of Singapore, Taiwan, South Korea and Taiwan adopted similar strategies of state investment in higher education as a means of cultivating the human resources deemed necessary for adapting to world markets. Whereas the United Kingdom and the United States had industrialized gradually on the basis of poorly educated working classes, the East Asian "tigers" demonstrated the benefits of an alternative model of industrialization in which an educated work force enjoyed a relatively egalitarian distribution of the fruits of rapid economic development.<sup>21</sup>

Four principal factors have driven the rapid expansion of higher education in China and India over the past quarter century. The first is simply demographic. China and then India have both had a massive demographic momentum in the college age population. While China's has peaked (the result of its one-child policy), India's is still growing, with more than 30 percent of the population below the age of 15 and more than 5 million people entering the 15-24 age group annually.

Second, this demographic education bulge in both countries is more prepared for higher education with the growth of secondary education in both countries (Figure 1a, 1b). China of course had addressed literacy and primary education much earlier, one of the key achievements of the Maoist era. India's record was much weaker in this regard and it is only in the new millennium that a combination of public funding (notably the *Sarva Shiksha Abhiyan* or "Education for All Program") and private efforts, led to near universal primary enrollment. More recently this wave has been moving downstream to the secondary level and the *Rashtriya Madhyamik Shiksha Abhiyan* ("National Secondary School Program") launched in 2009 to create greater opportunities at the secondary education level, is resulting in a substantial increase in India's secondary school cohort.

Third, the sheer growth of the two economies as well their greater integration into the global economy – China especially, but India as well – have sharply raised the demand for people with knowledge and skills. By 2011 China's share in the world economy was 10%, if measured by exchange rates, and 15% if measured by purchasing power parity. In India's case it was 3 and 6 percent respectively (Table 1). Around 1980 the two economies were roughly equal in size, but over three plus decades the Chinese economy has raced ahead and is today nearly three times the size of the Indian economy. The resource gap between their education sectors widened into a gulf. While education has become a big business sector in both countries, value added in education services in China soared from

<sup>&</sup>lt;sup>21</sup> David Ashton and Francis Green, *Education, Training and the Global Economy* (Northampton, MA: Edward Elgar Publishing, 1997): 7, 154-175.

\$10.4 billion in 1990 to \$257.6 billion in 2012, while in India it rose from \$6.9 billion to \$44.6 billion in the same period.<sup>22</sup>

Finally, demand for higher education is being driven by major changes in the aspirations of the populations in both countries as well as by state policy. Political leaders in both countries have endorsed a substantial increase in enrollments. In India, the stated goal is to move from a current enrollment of approximately 14% of its college-age population to 30% by 2020.<sup>23</sup> In China, the proportion of the age cohort enrolled in higher education has already increased from a miniscule 1.2% in 1978 to nearly 30% today; by 2020 it is slated to reach 40% of the age cohort.<sup>24</sup> As the world's two most populous countries, this rapid increase in enrollments is particularly impressive; today China and India lead the world in terms of the absolute number of students enrolled in institutions of higher learning (Fig. 2a, 2b).

Despite a shared commitment to increased enrollments, patterns of expansion in the two countries are in fact quite different. In China, massification (大众化) has been centered at public universities. As China abandoned the specialized Soviet model that had structured its higher education system during Mao's day to embrace an alternative Anglo-American model of the "comprehensive university" (综合大学), the Ministry of Education encouraged formerly separate institutes, colleges and universities to amalgamate. Between 1992 and 2000, some 556 previously separate schools were combined into 232 amalgamated institutions.<sup>25</sup> The mergers were accompanied by a major increase in the number of students, creating what were often only loosely integrated mega-universities (巨型大学) with enrollments of tens of thousands of students and operations spread over multiple campuses. In 1999, Chinese higher education enrolled 8.8 million students (10.5% of the age cohort); by 2006 the enrollment figure had increased by more than threefold to 25 million students (22% of the age cohort).<sup>26</sup> Although private schools also proliferated in this period, public institutions still accounted for more than 80% of enrollments in 2008 (Table 2).<sup>27</sup>

In early 2014, China's State Council approved a policy to convert some 600 provincial and local public colleges and universities into institutions for vocational training. Concerned about rising unemployment among the glut of college graduates generated by the rapid massification of higher

<sup>&</sup>lt;sup>22</sup> Source: NSF, "Science and Engineering Indicators 2012," Table 6-4 and "Science and Engineering Indicators 2014," Table 6-5.

 <sup>&</sup>lt;sup>23</sup> Devesh Kapur, "Addressing the Trilemma of Higher Education," Seminar 617 (January 2011): 89.
 <sup>24</sup> <u>http://www.chinaeducenter.com/en/cedu.php</u> (Accessed November 22, 2013); Washington Post (February 12, 2012).

<sup>&</sup>lt;sup>25</sup> Liu Jirong, *Gaodeng xuexiao hebing zuzhi de lilun yu shizheng yanjiu* [A study of the theory and practice of the amalgamation of higher education schools] (Zhejiang University doctoral dissertation, 2003): 1.
<sup>26</sup> Zhang Yinggiang, 2009: 44.

<sup>&</sup>lt;sup>27</sup> Washington Post (February 12, 2012).

education, the central government hoped to reverse the worrisome trend by encouraging more applied and professional instruction tailored to market demand. As a result of this action, vocational schools are slated to increase as a proportion of higher education institutions from 55% to 70-80%.<sup>28</sup> For 2014, the Ministry of Education announced that of the 6.98 million students admitted to higher education through the unified university entrance examination, 3.63 million would pursue regular undergraduate degrees while the other 3.35 million would be enrolled in technical training programs.<sup>29</sup>

In contrast to China, most of the growth in enrollments in higher education in India has taken place through the establishment of new private colleges in the last decade, with the bulk of expansion in professional and technical education like engineering, business, pharmacy, and the like. Between 2000-01 and 2011-12, the number of colleges in India increased from 12,806 to 35,539 which meant an average of nearly six new colleges *a day* for more than a decade (Fig 3a)! By 2011 India had 659 Universities (degree granting institutions) – 152 Central Universities under the federal government, 316 State Universities and 191 private ones (Fig 3b). The bulk of students are enrolled in undergraduate colleges affiliated to a university, of which 69 are Central government managed colleges, 13,024 under various state governments and 19,930 private colleges (Fig 3c). There are another 12,748 diploma granting institutions, of which 9,541 are private and the remaining 3,207 are under different state governments.

The vast majority of Indian college students are enrolled in private and state institutions of poor quality, with no research facilities and a dearth of qualified faculty. Although private higher education institutions are *de jure* non-profit, they are *de facto* commercial and profit maximizing. Recently, however, there have been new private entrants of higher quality and supported by philanthropy. Federal higher education institutions (so called central universities) continue to attract better students due to their better funding, greater autonomy from politics, selection criteria (competitive national exams), relatively modest fees (and generous scholarships and easy loans for needy students), and some commitment to research. After an initial burst in the 1950s and 1960s, there was a hiatus for nearly three decades before a new expansion of central universities in the 2000s. However, most students in public universities are in state universities. Indian states differ considerably in their economic performance and the political parties that dominate them. However, somewhat inexplicably, virtually all state universities are poorly governed. They charge little and teach little, yet there is little political pressure or leadership to undertake painful reforms.

<sup>&</sup>lt;sup>28</sup> http://news.xinhuanet.com/2014-03/24/c\_126305589.htm

<sup>&</sup>lt;sup>29</sup> *Zhongguo qingnian* [China Youth] (June 7, 2004): page 1.

China's most prestigious universities are also centrally managed, but a number of provincial and municipal level institutions have succeeded in attracting high calibre faculty and students. Wealthy cities and provinces – most notably Beijing and Shanghai – invest heavily in their institutions of higher education in order to satisfy the demands of their residents as well as to stimulate local economic growth.

#### Decentralization and Inequality

As the two Asian giants tackled the task of liberalizing sluggish economies in the late twentieth century, they faced parallel challenges in trying to remake their ivory towers. Leaders in both countries sought to reform centralized and politicized systems of higher education so as to promote intellectual innovation and propel national economic growth, while at the same time retaining affirmative action policies aimed at the redress of longstanding social inequalities that still afflict their huge and diverse populations. The inherent tension between the goal of fostering globally competitive elite institutions, on the one hand, and furthering social equality, on the other, was heightened by the demographic pressures of unprecedentedly large younger generations entering the college-age years. These basic similarities notwithstanding, the ways in which China and India have gone about the common task of reforming their systems of higher education turn out to be surprisingly different in many respects. Ironically, India – despite its democratic and federalist political system – has shown less appetite for relinquishing central control or diluting state-sponsored affirmative action programs than its Communist counterpart.

To be sure, in both China and India the central state continues to play a major role in defining and directing higher education. Indian higher education has been dubbed "the last refuge of the license raj," while in China college campuses are second only to military installations in terms of the degree of Communist Party penetration and control. Indeed, the rigorous military training and routinized political instruction to which Chinese college students are subject renders the distinction between army camps and university campuses somewhat moot. Both states also express a commitment to reducing social inequities through affirmative action admissions policies for underprivileged segments of their populations. In the case of India, the objective is to reduce discrimination based on caste and region; in the case of China, the aim is to level the playing field for its 55 officially designated "national minorities" as well as for impoverished Han Chinese. According to Article 9 of the Higher Education Law of the

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People's Republic of China, "the State takes measures to enable students who come from ethnic groups and students who have financial difficulties to receive higher education."<sup>30</sup>

In China, the difficulty of achieving affirmative action goals is intensified by regional disparities in educational infrastructure, quality, cost and access. Wealthy provinces and municipalities such as Zhejiang, Beijing and Shanghai provide substantial local government assistance to fund their famous institutions of higher learning, but universities in less prosperous places are forced to take out sizeable bank loans that translate into skyrocketing tuition and fees. The result is a price tag even at some public universities that exceeds the means of many Chinese families. To be sure, regional differences are not a new feature of Chinese higher education. After the reorganization of the early 1950s, 85 of China's 201 remaining institutions of higher education were located in East China, with 43 (or one-fifth of the national total) in Shanghai alone.<sup>31</sup> The origins of today's elite universities can be found in that 1952 reorganization effort (although many of the institutions had important pre-1949 roots as well). Concentrated in the richer East China cities and provinces, the top universities today attract a disproportionate share of students from privileged backgrounds: a national survey of 50 institutions in 10 provinces found, for example, that students from families of government officials were 18 times as likely as those with unemployed or laid-off parents to gain admission to national elite universities. Students from impoverished backgrounds are heavily concentrated in local institutions and vocational colleges.<sup>32</sup> The unified national entrance examination for higher education (高等学校招生全国统一考 试) is also stacked in favor of students in Beijing and Shanghai, whose municipal governments reserve extra slots at their renowned public universities for students with local household registration even when their examination scores are well below those of outside applicants.

Since the mid-1980s, Chinese institutions of higher education have been encouraged to further diversify their financial base by seeking non-government sources of support in the form of tuition fees, profits from school-sponsored enterprises and consultancies, and philanthropic giving. Before this period, colleges and universities were entirely dependent upon government funding and higher education was provided free of charge. Since the 1990s, however, non-government funds have accounted for a rapidly rising proportion of operating expenses: 30% in 1995, 44% in 2000, and 56% in 2007.<sup>33</sup> With Chinese society shouldering a growing percentage of the cost of higher education, the content and quality of instruction is increasingly subject to market demand. Such a trend may be

<sup>&</sup>lt;sup>30</sup> <u>http://www.chinaeducenter.com/en/cedu.php</u> (Accessed November 20, 2013)

<sup>&</sup>lt;sup>31</sup> Zhang Yingqiang, 2009: 9.

<sup>&</sup>lt;sup>32</sup> Qiang Zha, 2011: 36.

<sup>&</sup>lt;sup>33</sup> Zhu and Lou, 2011: 79.

welcomed as a sign of reduced government control, but it comes at a steep price. Practical and applied knowledge tends to be preferred over liberal arts and basic research. Wealthy families are better able to secure high quality education for their children. And the better schools are increasingly concentrated in the more economically developed urban areas.<sup>34</sup> A recent survey summarizes the outcome: in China, "college is a rich, Han, urban male club."<sup>35</sup>

In India there are multiple axes of inequalities in higher education, across social (caste) and religious groups, across states, the rural-urban divide and gender and income. Unlike China, however, these inequalities have been declining in recent years, with one exception: the gap between income groups appears to be widening. For instance the ratio of girls to boys enrolled in higher education was a dismal 0.13 in 1950 and gradually rose to 0.28 in 1970 and 0.46 in 1990. It rose more rapidly in the next two decades to 0.78 in 2010 somewhat under the secondary school ratio of 0.82. In the case of other social and religious groups while the gaps are large in the overall population (reflecting past inequalities), they decline considerably among those currently enrolled in college.

The unequal representation in Indian higher education is mainly due to inequalities at the lower rungs of the education ladder and only secondarily due to unequal access to tertiary education per se.<sup>36</sup> Completing higher secondary education is a necessary condition to enter the portals of higher education. In 1999 the higher secondary completion rates for India's low castes, tribals, upper castes and Muslims was 4.93, 4.35, 21.99 and 7.12 percent respectively. By 2009, this had climbed to 9.44, 7.98, 32.83 and 10.63 percent respectively.<sup>37</sup> However, until recently Indian policies have focused much more on affirmative action in higher education instead of improving higher secondary completion rates for weaker social groups. Increasingly, the rapid expansion of private higher education has meant that access depends on the ability to pay, which means almost inevitably that – despite a massive expansion in bank loans for higher education from Rs 300 crores in 2000 to nearly Rs 62,000 crores (approximately \$10 billion)in 2014 – those with higher incomes will have greater access.

#### Politics and Political Leadership

<sup>&</sup>lt;sup>34</sup> Zhu and Lou, 2011: 97.

<sup>&</sup>lt;sup>35</sup> Xiaobing Wang, Chengfang Liu, Linxiu Zhang, Yaojiang Shi and Scott Rozelle, "College is a Rich, Han, Urban Male Club: Research Notes from a Census Survey of Four Tier One Colleges in China," *China Quarterly*, vol. 214 (May 2013): 456-70.

<sup>&</sup>lt;sup>36</sup> Mehtabul Azam and Andreas Blom, "Progress in Participation in Tertiary Education in India from 1983 To 2004," World Bank Policy Research Working Paper 4793, December 2008.

<sup>&</sup>lt;sup>37</sup> Rakesh Basant and Gitanjali Sen, "Access to Higher Education in India: An Exploration of its Antecedents," IIM Ahmedabad Working Paper No. 2013-05-011, May 2013.

Indian prime ministers routinely bemoan the abysmal condition of Indian higher education, while nonetheless refraining from active intervention. In the PRC, by contrast, there is a continuing tradition of forceful intervention in education policy by central leaders. Strong political leaders, as part of their statecraft credentials, are expected to make dramatic pronouncements on education. Mao Zedong established the pattern with his famous "Talks on Education," delivered shortly before the outbreak of the Cultural Revolution.<sup>38</sup> Mao drew upon China's own experience of revolutionary education to criticize the Soviet "revisionist" model of specialized academies and institutes in favor of practical and highly politicized forms of mass education. The result was that most Chinese universities ceased to function for the better part of a decade. Deng Xiaoping's post-Mao educational reforms sought to repair the damage of the Cultural Revolution, resuscitating Chinese higher education to serve as a powerful engine of national economic modernization. Deng's dramatic restoration of the national college entrance examination in 1977 signaled a return to academic merit, in place of revolutionary fervor, as the key criterion for admission and advancement. The decision in 1999 to radically expand college enrollments was also made by the top leadership, who "ignored opposition from the Ministry of Eduation (MOE), overturned established policies, and assumed *de facto* control over MOE bureaucratic power."<sup>39</sup>

General Secretary Jiang Zemin and his colleagues ensured that the massification of Chinese higher education would be accompanied by an elitist pattern of strategic state investment. On the occasion of Peking University's centennial celebration in May of 1998, a speech by Jiang Zemin launched what came to be known as "Project 985" (for the year and month of Jiang's announcement) by which impressive infusions of central state funding were to be funneled to a small handful of universities deemed capable of becoming "world-class universities." Project 985 had been anticipated a few years earlier by "Project 211," a Ministry of Education initiative which showered financial resources on China's supposedly top 100 universities, in hopes that at least a subset of them might reach "global standards" in the 21<sup>st</sup> century. But Project 985 was even more selective than its forerunner; at first limiting its support to a mere nine universities and then expanding to include an additional 39 institutions.<sup>40</sup> The funding formula within Project 985 was also hierarchical: Peking University and Tsinghua University were given the privilege of being exclusively funded by the central government (with 1.8 billion RMB each for the first three years of Project 985), whereas other Project 985 recipients were forced to seek

<sup>&</sup>lt;sup>38</sup> Stuart Schram, *Chairman Mao Talks to the People* 

<sup>&</sup>lt;sup>39</sup> Qinghua Wang, "Crisis Management, Regime Survival and 'Guerrilla-Style' Policy-Making: The 1999 Decision to Radically Expand Higher Education in China," *China Journal*, no. 71 (January 2014): 132.

<sup>&</sup>lt;sup>40</sup> <u>http://www.eol.cn/html/g/gxmd/985.shtml</u> (Accessed April 17, 2015).

matching funds from various sources at lower levels of the political system.<sup>41</sup> The result of this targeted funding by the central government has been a further stratification of Chinese universities, with a small number of aspiring global players on top of the pyramid structure, a sizeable number of provincial universities, independent colleges and degree-granting private universities in the middle, and a still larger number of vocational colleges bringing up the bottom tier.<sup>42</sup> China's current President, Xi Jinping, has already put his personal stamp on higher education policy by calling for "world-class universities with Chinese characteristics" in a May 2014 speech at Peking University. Rather than simply imitate famous foreign universities, Chinese educators were encouraged to develop an alternative (if unspecified) model. Xi explained, "the world can have only one Harvard . . . but China can have its own Peking, Tsinghua, Fudan, Nanjing and Zhejiang universities."

Whereas Indian politicians have been driving the proliferation of private colleges in that country, in China government officials are closely tied to the expansion and enrichment of public universities. At Chinese public universities, the nexus between academic administration and political position is formally recognized. Presidents and party secretaries at public universities are considered part of the Party/state Nomenklatura, with university presidents holding the bureaucratic rank equivalent to that of a vice-minister of a central ministry. By contrast, the recent growth of private universities in China is primarily propelled by entrepreneurs hoping to turn a profit.<sup>43</sup>

The university system in India is the collateral damage of Indian politics. The vast majority of government colleges in small towns offer dismal educational outcomes. For politicians, the benefits of the license-control raj extend beyond old-fashioned rent seeking by manipulating contracts, appointments, admissions and grades in government run colleges and universities, to the use of higher education admissions for vote-banks and partisan politics and a source of new entrepreneurial activities

<sup>&</sup>lt;sup>41</sup> Qiang Zha, 2011: 31.

<sup>&</sup>lt;sup>42</sup> Qiang Zha, 2011: 32

<sup>&</sup>lt;sup>43</sup> Exceptions do exist, however. For example, Shanghai's private Jianqiao Xueyuan (Cambridge College) was founded by a wealthy Wenzhou businessman who at least claims that his motive is one of philanthropy (and filial piety in honoring his mother's Buddhist beliefs) rather than profit. The glitzy new private Shanghai Institute for the Visual Arts (SIVA), while bankrolled by six of the city's wealthiest entrepreneurs, is the brainchild of former Vice Mayor Gong Xueping, who is credited with building the new Shanghai Library, Shanghai Museum, and Shanghai Grand Theater during his tenure as Vice Mayor. According to Gong, the purpose of SIVA is to develop the city's "cultural production" so that Shanghai becomes known as a center of cultural creativity rather than simply an economic hub. (Interview with the President of Jianqiao Xueyuan, Shanghai, October 2012; interview with Gong Xueping, Shanghai, July 2010).

(in private higher education).<sup>44</sup> India's governance weaknesses beset public services more generally, and the shortcomings of higher education are simply one more manifestation of this affliction.

Three key factors have shaped the political economy of India's higher education: the structure of inequality in India; the principal cleavages in Indian politics; and the nature of the Indian state. India's historic severe degree of educational inequality led to a populist redistributive backlash when hitherto marginalized social groups came to power. However, the specific redistributive mechanisms were conditioned by the principal cleavages in Indian politics and the nature of the Indian state. The growth of identity politics sharply enhanced political mobilization around two key cleavages in Indian society: caste and religion. Consequently, redistributive measures followed these two cleavages rather than other possibilities such as income, region (urban-rural), or gender. Moreover, given the fiscal constraints of the Indian state and the shifting locus of rents, redistribution focused on much more "visible" forms which explains why Indian politicians have obsessed over reservations in elite institutions of higher education rather than improve the quality of primary and secondary schooling and the thousands of government colleges of abysmal quality.

#### **Regulation and Governance**

In China, the Communist party-state's administrative and propaganda apparatus continues to play a key role in governing the country's universities. During the Mao period, institutions of higher education were typically managed by various central government ministries (with, for example, the Ministry of Coal operating institutes for mining technology, the Ministry of Machine Building running institutes of mechanical engineering, the Ministry of Public Health administering medical schools, and so on). Today, however, the Ministry of Education is the only central ministry encouraged to manage universities (with 72 institutions falling under its direct auspices); the great majority of the country's institutions of higher education have been placed under the control of provincial and other local governments.<sup>45</sup>

Relative to their Indian counterparts, Chinese universities appear quite autonomous. Academic decisions (faculty hires and promotions, new teaching programs and research institutes, cooperative agreements with foreign universities, and so on) are for the most part decided within universities – albeit with review and ultimate approval vested in the Ministry of Education or other relevant government (and party) agencies. At large, comprehensive universities, basic personnel, curricular and

<sup>&</sup>lt;sup>44</sup> Devesh Kapur and Pratap Bhanu Mehta "Mortgaging the Future? Indian Higher Education," *Brookings-NCAER India Policy Forum*, Volume 4: 101-157, 2008.

<sup>&</sup>lt;sup>45</sup> Zhang Yingqiang, 2009: 59.

research operations are further devolved to the faculty or school level with only overall budget, construction, and major personnel decisions made by the university administration.

This apparent autonomy is, however, tempered by the role of the Chinese Communist Party. Not only are leaders at public universities part of the Nomenklatura system of the Communist partystate; the university's party committee exercises a veto option over all important university decisions. The basic system of party control was imported from the Soviet Union in the 1950s, but it operates even more forcefully in its Chinese version: "In universities and other key education institutions in the Soviet Union, the party secretary's job was to oversee party members. In China . . . the party secretary has the ability to control both party members and appointments and also oversee the curriculum, outranking the titular head of the institution, the president."<sup>46</sup> This campus governance structure is embedded within a larger framework of party supervision and direction. The Communist Party's central and provincial propaganda departments set the agenda, conduct the selection and evaluation process, and regulate the funding for major research projects in the humanities and social sciences.

The continued influence (and interference) of the Communist Party in academic matters is often criticized as an impediment to the development of Chinese higher education on grounds that great universities cannot flourish in an illiberal political environment.<sup>47</sup> At the same time, it must be acknowledged that the close connection between government and academia that prevails in the PRC affords the Chinese state a strategic advantage in targeting and leveraging the resources of higher education in service to its own national and local priorities. Few other countries (with the notable exception of Singapore) are as well positioned to advance and exploit university training and research for state-directed development.

Since the higher education reform of 1998, Chinese university administration has generally become more streamlined and efficiency-minded. For example, after the process of amalgamation, Harbin Industrial University saw its 42 administrative agencies reduced to 13. Whereas previously the university bureaucracy had included 25 Party/government agencies, after 1998 the number stood at only three: one for university administration, one for student work, and one for discipline and surveillance. The nine Party/mass association agencies that had operated on campus prior to 1998 were reduced to two: a political work department and a union office.<sup>48</sup>

<sup>&</sup>lt;sup>46</sup> Richard McGregor, *The Party: The Secret Word of China's Communist Rulers* (New York: HarperCollins, 2012): 79.

<sup>&</sup>lt;sup>47</sup> William C. Kirby, "The Chinese Century? Challenges of Higher Education," *Daedalus* (Spring 2014)

<sup>&</sup>lt;sup>48</sup> Ying Wangjiang, *Zhongguo gaodeng jiaoyu gaige yu fazhan 30nian* [30 Years of Chinese higher education reform and development] (Shanghai: Shanghai Finance University Press, 2008): 414.

China's commitment to reduce the size of academic administration stands in stark contrast to higher education trends in other parts of the world. In the U.S., the number of administrators and professional staff at universities and colleges has doubled in the past 25 years – a rate of increase more than twice that of student enrollments in the same period. The notable rise in the cost of higher education in the U.S. has been linked directly to the proliferation of highly paid administrators.<sup>49</sup> While American higher education is succumbing to what – to adapt a phrase from Clifford Geertz – we might term "academic involution," China is running its mega-universities with an ever leaner staff.<sup>50</sup>

In contrast to China – and indeed relative to its own pre-independence past – Indian higher education is highly centralized, politicized and paradoxically anti-intellectual. The prevailing political ideological climate in which elite institutions are seen as anti-democratic, finds its natural response in political control to influence admissions policies, internal organization, and the structure of courses and funding. The fact that the system nonetheless produces a noticeable number of high-quality students is due largely to Darwinian selection mechanisms rather than to pedagogic achievements.

Higher education in India suffers from political, administrative and regulatory interference on virtually every aspect of higher education – be it admissions policies, internal organization, fees and salaries, and the structure of courses and funding, although the sheer size of the system is forcing some degree of loosening. Regulatory approvals are extremely rigid with regard to infrastructure requirements (irrespective of costs or location) and an insistence on academic conformity to centrally mandated course outlines, degree structures and admissions policies. The highly centralized regulatory process produces an adverse selection in the kind of entrepreneurs that invest since the success of a project depends less upon the pedagogic design of the project than the ability to manipulate the regulatory system.<sup>51</sup> Severe governance weaknesses – of the regulatory system as well as within individual institutions – have resulted in Indian courts emerging as a significant actor shaping higher education policy, often not for the better. And a key stakeholder—faculty—is either absent (manifest in the acute shortage of qualified faculty) or at best poorly trained and rarely a flag bearer of professional norms and standards.

<sup>&</sup>lt;sup>49</sup> Joe Marcus, "New Analysis Shows Problem Boom in Higher Education Administrators," *Huffington Post* (February 6, 2014).

<sup>&</sup>lt;sup>50</sup> Clifford Geertz borrowed the term "involution" from the American anthropologist Alexander Goldenweiser, to refer to the "overdriving of an established form in such a way that it becomes rigid through an inward overelaboration of detail." Rather than increased efficiency, there is a growth in "technical hairsplitting" to provide a niche for an ever increasing number of people. Clifford Geertz, *Agricultural Involution: The Processes of Ecological Change in Indonesia* (Berkeley: University of California Press, 1963): 80-90.

<sup>&</sup>lt;sup>51</sup> Kapur and Mehta, 2008.

#### Internationalization and Innovation

In both China and India, the state's principal goal in espousing higher education reform is to facilitate the transition from a manufacturing economy to a "knowledge" economy propelled by technological innovation. In pursuing educational reform, the Indian and Chinese central governments have both expressed support for a range of policies intended to render their systems of higher education better equipped for international economic competition in the twenty-first century. In both cases, moreover, *globalization* has been embraced as a pillar of the reform agenda. Openness to international academic ideas, standards and talent is explicitly endorsed. Attentiveness to world university rankings and attractiveness to foreign students, faculty and curricula are underscored.

In light of these broad similarities, the differences between the two countries are especially intriguing. Despite the deep involvement of the Chinese Communist Party and its Central Propaganda Department, the PRC's system of higher education has shown a remarkable receptivity to outside initiative. To illustrate the contrast between the Asian giants, consider the following two recent and well publicized developments in transnational philanthropy: the Indian government's grant of Rs 25 crore (5 million US dollars) to establish a new Indira Gandhi Centre for Sustainable Development at Oxford University; and the Chinese government's announcement of a 300 million US dollar gift (principally from American businessman Stephen Schwarzman) to establish at Tsinghua University a new Schwarzman College intended to rival Oxford's legendary Rhodes Scholarship.<sup>52</sup> In the former case, a modest sum of government money flows out of Delhi to attach an official Indian name to one of the world's elite universities located in the UK; in the latter case, sixty times as much private money flows toward Beijing to attach an entrepreneurial American name to China's top engineering school in a bid to accelerate its ascent into the rarified ranks of the international elite. The latter strategy appears to be paying off handsomely; although the Schwarzman College is not scheduled to open its doors until the fall of 2016, over just the past year Tsinghua jumped from thirty-first to twenty-fourth place in the Times Higher Education World University Rankings of the top 50 engineering and technology schools in the world.<sup>53</sup> Not to be outdone, Peking University recently announced plans for a new Yenching Academy generously financed by Chinese businessmen – that promises to welcome its own variant of Rhodes

<sup>&</sup>lt;sup>52</sup> On the former, see Devesh Kapur, "The Elite's Classrooms," *Business Standard* (November 12, 2012); on the latter, see <a href="http://schwarzmanscholars.org/">http://schwarzmanscholars.org/</a> (Accessed December 8, 2013).

<sup>&</sup>lt;sup>53</sup> <u>http://www.timeshighereducation.co.uk/world-university-rankings/2011-12/subject-ranking/subject/engineering-and-IT</u> (Accessed December 8, 2013).

Scholars from elite universities around the world a year sooner than neighboring Tsinghua, in the fall of 2015.

While these particular examples may seem idiosyncratic or extreme, they are symptomatic of broader differences in the two countries' globalization strategies that have developed over time. Postindependent India had actively sought global collaborations as it set about creating the new IITs and IIMs that would become centers of excellence in higher education. Thus Indian Institute of Technology, Kanpur, established in 1959, benefited in its first decade from the Kanpur Indo-American Programme, where a consortium of nine US universities helped set up the research laboratories and academic programs. The Indian Institute of Management Ahmedabad (established in 1961) collaborated with Kellogg School, Wharton School and Harvard Business School in its initial years, while Indian Institute of Management, Calcutta was developed in collaboration with MIT. Faculty training and program design were the key elements in these collaborations.

A less heralded, but equally successful international collaboration occurred in the development of Indian agriculture higher education institutions modeled on US Land Grant universities. Nine new state agricultural universities were created (one per state) in collaboration with five US universities who supplied 300 professors on assignments of two or more years to these nine Indian universities. And more recently given the deep crisis in public health in India, the Indian government has partnered with the Gates Foundation (as well as the World Bank, World Health Organization and Wellcome Trust) in the creation of the Public Health Foundation of India (PHFI), an autonomous public-private partnership that is establishing new public health schools in India to address the country's India's poor record in this area.

In contrast with China, however, while foreign universities may collaborate with Indian partners through various mechanisms, they are not allowed directly to offer their own degree programs in India. Media reports cite a 2010 study by the Association of Indian Universities (AIU) that more than 600 foreign education providers were operating in India, largely through twinning programs (whereby students study partly in India and partly overseas) that either award a degree from the overseas partner or a dual degree (one from the local provider and one from the overseas partner).<sup>54</sup> Most such programs are in professional education (business related degrees, engineering and hotel management), with the providers mainly from the UK and US. A new development stems from the Indian government's endeavor to set up community colleges for workforce development to fill major skills gaps in trades. Many of these are developing institution-to-institution tie-up with U.S. community colleges (IIE 2013).

<sup>&</sup>lt;sup>54</sup> Megha Aggarwal, "Local Shores, Global Dreams, *The Hindu*, November 17, 2013. http://www.thehindu.com/features/education/college-and-university/local-shores-globaldreams/article5357872.ece

The Indian government's introduction of a "Foreign Educational Institutions (Regulation of Entry and Operations) Bill" in parliament in 2010 proved contentious. To get around it in late 2013 the apex regulator (UGC), crafted a set of administrative rules that would provide a legal framework for overseas institutions to establish and operate campuses in India as not-for-profit entities.<sup>55</sup> Even then the proposed rules lack clarity on the degree of autonomy the foreign institutions would enjoy and how that would differ from the regimen to which private Indian institutions are subject. The more these institutions are exempt from the plethora of regulations to which their Indian counterparts are subject, the more uneven the playing field vis-à-vis domestic institutions. But if they enjoy little autonomy, the less inclined they will be to enter India, rendering the entire effort moot.

In the PRC, degree granting programs by leading foreign universities were introduced nearly thirty years ago and today flourish in abundance, particularly at China's top public universities.<sup>56</sup> Johns Hopkins University pioneered the Chinese pattern in 1986 with the establishment on the campus of Nanjing University of the Hopkins-Nanjing Center for Chinese and American Studies, which offers a Master of Arts degree in International Studies awarded jointly by Johns Hopkins and Nanjing University that is accredited in both the US and China. When China became a full-fledged member of WTO in 2001, international educational cooperation was extended to all sectors of education except for military, political and Communist Party training. By 2009, the Chinese government had approved more than a thousand joint Chinese-foreign educational programs and institutions in more than 20 provinces.<sup>57</sup> Several foreign universities have established new branch campuses or joint ventures in China which award only foreign degrees; among the most noteworthy are NYU Shanghai, the University of Nottingham Ningbo, and Duke Kunshan University. The PRC has also aggressively sought mutual recognition of academic credentials, diplomas and degrees with other countries; by 2013 it had succeeded in signing academic reciprocity agreements with 41 countries (including Germany, France, the United Kingdom, Australia and New Zealand).<sup>58</sup>

<sup>&</sup>lt;sup>55</sup> The foreign institutions intending to apply under the proposed rules must be not-for-profit legal entities that have been in existence for at least 20 years and registered by an accrediting agency of the country concerned or by an internationally accepted system of accreditation. Moreover, the order stipulates that the institution must be among the top four hundred universities in the world (according to rankings published by the Times Higher Education, London, Quacquarelli Symonds or Shanghai Jiao Tong University).

<sup>&</sup>lt;sup>56</sup> http://pkunews.pku.edu.cn/xywh/2013-06/17/content 275630.htm75630.htm (Accessed December 8, 2013)

<sup>&</sup>lt;sup>57</sup> Hong Zhu and Shiyan Lou, *Development and Reform of Higher Education in China* (Oxford: Woodhead Publishing, 2011): 125-126.

<sup>&</sup>lt;sup>58</sup> <u>http://news.xinhuanet.com/world/2014-09/01/c\_1112315109.htm</u> (Accessed April 17, 2015).

The number of foreign students in China and India reflects a similar disparity. India reports just over 27,531 foreign students enrolled in its colleges and universities (Table 3b); China boasts ten times that number. In 2011 China hosted a total of 292,611 foreign students from 194 countries studying at 660 higher education institutions (Table 3a). This marked more than a ten percent increase over the previous year. That this increase was fueled in good part by state initiative can be seen in the fact that the number of foreign students receiving Chinese government scholarships (25,687) jumped by nearly fifteen percent in that single year. The ten countries sending the largest number of international students to China in 2011 were: Korea, 62,442, United States, 23,292, Japan, 17,961, Thailand, 14,145, Vietnam, 13,549, Russia, 13,340, Indonesia, 10,957, India, 9,370, Pakistan, 8,516 and Kazakhstan, 8,287.<sup>59</sup> Considering India's geographical proximity and gigantic population, its students are substantially underrepresented in Chinese colleges and universities – and vice versa. An important reason why India has been unable to host foreign students is the severe shortage of quality institutions. However, this is changing as the number of decent private institutions which have a strong interest in attracting foreign students is growing.

With America currently enjoying the reputation of having the best higher education system in the world, it is only natural that American campuses would be a magnet for bright students from across the globe, especially from Asian countries where educational ambitions outstrip local opportunities. Not surprisingly, China and India, followed closely by South Korea, are the top countries of origin for foreign students in the United States, together contributing nearly half of all international students on American college and university campuses (Table 4a). In the past academic year (2012-13), students from China comprised 235,597 of the 819,644 foreign students at US institutions of higher education, a 21% increase over the previous year. Although ranked second, India contributed fewer than half the number of students as China.<sup>60</sup> Despite India's historic connection to Great Britain, an even bigger discrepancy exists in British academe; in 2012-13 a total of 83,790 Chinese were studying at universities in the U.K., compared to a mere 22,385 Indians (Table 4b).

The PRC government has made a major national investment, via its lavishly funded China Scholarship Council (CSC), in providing thousands of scholarships each year to send advanced graduate students and younger faculty abroad. In some cases, CSC recipients enroll in multi-year foreign degree

<sup>60</sup> http://www.nytimes.com/2011/10/14/world/asia/squeezed-out-in-india-students-turn-to-united-states.html (Accessed December 10, 2013) If we turn the equation around, we find that there are almost three times as many American college students in China as compared to India. <u>http://www.dnaindia.com/mumbai/report-number-of-indian-students-to-the-us-drops-by-3-5pct-1917036</u> (Accessed December 8, 2013)

<sup>&</sup>lt;sup>59</sup> <u>http://www.csc.edu.cn/laihua/newsdetailen.aspx?cid=122&id=1399</u> (Accessed December 6, 2013)

programs; in other cases, they simply spend a year of study and research at leading universities around the world. Many universities and local governments in China also offer substantial material incentives for overseas academic experience. Jilin University, for example, requires that all its assistant and associate professors spend at least one calendar year on a study or research program abroad in order to become eligible for promotion to the next rank. Similarly, the municipal government of Shanghai offers a generous financial bonus to faculty members at the city's various universities upon their return from a year abroad on an approved research program.

At both central and local levels, Chinese government strategies for promoting the globalization of higher education are self-consciously tailored to the criteria used in the major rankings of world universities (Times Higher Education, Shanghai Jiaotong, QS, CWUR, US News and World Report, and so on). Because articles published in English language journals listed in the Science Citation Index (SCI) and Social Science Citation Index (SSCI) count heavily in these ranking schemes, Chinese universities (again with substantial state support) have established massive post-doctoral fellowship programs designed to recruit young researchers whose sole responsibility is to produce such articles. The post-docs are generally hired on short-term contracts, renewable upon fulfillment of the publication quota. Needless to say, their lack of teaching duties means that these post-docs contribute little if anything to the instructional life of the university. Regular faculty members are encouraged to produce such articles as well, and are rewarded with handsome bonuses (typically the equivalent of US\$10,000 and more) if they succeed in doing so. With English considered the *lingua franca* of academia these days, the world rankings consider the percentage of courses taught in English to be an indicator of a university's degree of globalization. Again faculty members are offered sizeable bonuses (US\$5,000 or more per course) as an incentive for compliance; unfortunately, the English language competence of some of those who accept the extra remuneration for conducting their classes in "English" is questionable at best.

Although the Indian media and senior government officials have been wringing their hands over the lack of any Indian university in the top world rankings, they have taken only limited steps to address the issue. The disparity with China is clear. In the QS rankings of top Asian universities in 2014, for example, China had 9 universities in the top 50 and 22 in the top 100 while India had just 2 and 8 respectively. Two factors weigh heavily in university rankings: publications and international students. We have already noted the large difference in attracting foreign students. The relentless publications drive so evident in Chinese universities is also much weaker in India and the gap between them has been growing (Fig. 6). One reason might be a more severe brain drain from India. For instance, a recently compiled dataset of the educational background of faculty in the top 50 computer science programs in

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American universities found that of the 20 most common undergraduate institutions, 15 are in the US, 4 in India and one in China.<sup>61</sup>

It is of course hard to judge how such disparities in rankings translate into actual educational value. For Chinese universities that aspire to become "world-class universities" (世界一流大学), a term popularized by Jiang Zemin's May 1998 speech at Peking University, academic excellence is gauged less in terms of the quality of teaching and learning than in measurable prestige indicators. At Nanjing University, for example, significant resources are diverted to support the research of particular members of the science faculty in hopes that one of them will someday become China's first Nobel laureate scientist.<sup>62</sup>

Much effort is expended to internationalize the faculty of Chinese universities by hiring foreign nationals as well as offering tempting terms for Chinese citizens who return home after completing their graduate studies abroad. The Ministry of Education has established a national center that provides a wide array of services for returned students, including applying for start-up research funds on their behalf.<sup>63</sup> The Changjiang Scholars Award Program has also served to attract outstanding talent from overseas, providing internationally competitive salaries and research funding for scholars with a global reputation.<sup>64</sup> One piece of suggestive evidence on the effect of such initiatives is the growth of research articles with international co-authors. For China internationally coauthored articles in science and engineering fields increased more than 10-fold from 2,914 in 1995 to 31,081 in 2012, while for India the increase was considerably more modest (somewhat less than 5-fold), from 1,583 to 7,332 during the same period.<sup>65</sup>

The only aspect of international education where India is edging out China is in cross-border delivery of education services (what is known as Mode 1 in the GATS, or General Agreement on Trade in Services, of the WTO). The emergence of MOOCs—"massive online open courses"—built on open-source teaching platforms, including video lessons and discussion forums and even virtual laboratories where students can carry out simulated experiments, is a potential game changer in higher education. A recent preliminary analysis of participants in MOOCs courses finds that the first movers are young, well

<sup>&</sup>lt;sup>61</sup> http://cs.brown.edu/people/alexpap/faculty\_dataset.html

<sup>&</sup>lt;sup>62</sup> Jun Li and Jing Lin, with Gong Fang, "Nanjing University – Redeeming the Past by Academic Merit," in Ruth Hayhoe et. al., eds., 2011: 161.

<sup>&</sup>lt;sup>63</sup> Zhou Ji, 2006: 257.

<sup>&</sup>lt;sup>64</sup> Zhou Ji, 2006: 258.

<sup>&</sup>lt;sup>65</sup> Source: Table 5-41, National Science Board, Science and Engineering Indicator, 2014.

educated, and employed, with a bias towards young males more pronounced in non-OECD countries.<sup>66</sup> While a majority were from developed countries (and a third from the US alone), the second largest country was India. This is one instance where China appears handicapped relative to India due both to its comparatively low level of English language competency and to the extensive internet "firewalls" which make accessing these courses more difficult for prospective students in the PRC.<sup>67</sup>

#### Conclusions

While it is clear there has been massive growth in higher education in both China and India in recent years, whether measured by the number of students enrolled or the amounts of public and private money expended, it is unclear just how meaningful this large growth is. There is for instance little knowledge of what is happening *within* universities and to the students who spend a considerable part of their prime years in these institutions. This reflects a larger lacuna in analytical work on higher education. In general researchers have found it exceedingly difficult to get a good grip on two critical outcome measures: 1) quality in higher education beyond research publications and post-degree earnings; and 2) the value added by higher education over and beyond the student's innate abilities. It is entirely possible that even in systems which are of good quality, the credentialing aspects of higher education benefit the few who have access to it and crowd out from labor markets others with similar ability but who lack access. Just as an arms race does not lead to greater security despite much greater spending, the upward spiral in education credentialing may not yield social or economic benefits commensurate to the expenditure.<sup>68</sup>

The evolution of higher education and the debates surrounding higher education in China and India have focused primarily on its instrumental role, in particular skilling labor for a growing economy and higher education's role in advancing research and innovation. However, the normative role of higher education – for instance, does it make for better citizens or fairer and more resilient societies – is little debated, perhaps because these relationships are poorly understood to begin with. To be sure,

<sup>&</sup>lt;sup>66</sup> Christensen, Gayle, Andrew Steinmetz, Brandon Alcorn, Amy Bennett, Deirdre Woods, and Ezekiel Emanuel, "The MOOC Phenomenon: Who Takes Massive Open Online Courses and Why?,"

Available at http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2350964

<sup>&</sup>lt;sup>67</sup> There are a host of questions around what MOOCs can and cannot do. Their value in professional and S&T courses appears much greater than in the humanities, and of course they affect teaching and not research. However, to access them students in China and India need access to hardware and bandwidth as well course material in local languages (and in India's case multiple Indian languages), if the courses are to be available to a majority of their populations.

<sup>&</sup>lt;sup>68</sup> Wolf, A. (2004). Education and Economic Performance: Simplistic theories and their Policy Consequences." *Oxford Review of Economic Policy*, 20(2):315-333.

Chinese propaganda departments at all levels devote considerable resources to the teaching of both "cultural literacy" (文化素质教育) and "ideology" (思想政治教育) under the pretext that such courses help foster patriotic and politically reliable citizens. But students and faculty alike tend to regard such instruction as a tedious waste of time.

Rival conceptions of citizenship inevitably generate disagreements about which educational processes yield the desired ends. The very promise of higher education also makes this a politically contentious issue. Universities are inherently political because they influence the minds and life chances of young adults. And they are becoming even more so because of the growing awareness of the distributional implications of higher education. As private provision and international education grow, issues of equity and access will become even more contentious. Many of the underlying handicaps faced by students from lower socio-economic groups appear to occur much earlier in the life cycle – at the primary and secondary school level – but policies to overcome these handicaps are deferred to higher education, often too little and too late. An important reason why Chinese higher education has galloped ahead of India, is that it strengthened its primary and secondary education systems first, which India is only now attempting to achieve. Consequently Indian higher education became a victim of distributional politics which China appears so far to have by and large avoided. But recent protests by Chinese migrant workers (instigated by the now banned New Citizens' Movement) demanding open access to the university entrance examination, indicate the potential volatility of these concerns in China as well.

Contrasts between the two Asian giants may also be traceable to deeper historical roots. China's obsession with competitive credentialing suggests a culturally specific conception of statecraft linking educational success to state power. In 2008, Chinese universities conferred more than 50,000 doctoral degrees, outpacing the U.S. to become the world's biggest producer of doctorates. However, in contrast to the U.S., where doctoral degree holders typically go into teaching or research, in China more than half of the new doctoral degree recipients took jobs within the government bureaucracy at national or provincial levels. As Qiang Zha observes, the Chinese pattern "resulted from an explicit or implicit strategy of absorbing academic elites into the polity and bureaucracy in order to heighten the government's legitimacy."<sup>69</sup> Chinese often remark that whereas the brightest Americans go into business or academia, relegating the least talented to government service, in China precisely the opposite pattern prevails.

The fierce competition among Chinese college students for admission into the Communist Party is another indication of the allure of official position to those with ambition and education. The

<sup>&</sup>lt;sup>69</sup> Qiang Zha, "Is there an Emerging Chinese Model of the University?" in Ruth Hayhoe et. al., eds., 2011: 468.

*Economist* reports that "[i]n 1997 just over 4% of undergraduates were party members. Within a decade the proportion had doubled. In some colleges more than 80% of upper-year students now apply for membership . . ."<sup>70</sup> The explanation for this sudden surge of interest in party membership lies not in some newfound ideological zeal on the part of the younger generation, but in a more familiar pattern of intellectuals' attraction to bureaucratic employment. With the recent glut of graduates produced by expanded university enrollments, desirable jobs are in short supply and government posts – which offer security and benefits and for which Party membership is a distinct advantage – are highly sought after.

Further evidence of the connection between education and statecraft can be seen in the Chinese government's aggressive efforts to extend its cultural influence beyond its own territorial borders. The hundreds of Confucius Institutes recently established on college campuses across the globe serve as platforms to promote the teaching of Chinese language and to encourage the study of China more broadly. As of December 2014, there were 475 Confucius Institutes operating in 126 countries.<sup>71</sup> The goal is to expand the number to 1,000 by the year 2020. Ten years ago, the University of Maryland was the first American university to welcome a Confucius Institute. Today, Confucius Institutes exist on dozens of American campuses, including those of such prestigious universities as Stanford, Columbia and Michigan.<sup>72</sup> Although the University of Chicago and Penn State University declined to renew their Confucius Institutes when the initial contract expired, the overall trend – in the U.S. as elsewhere around the globe – is for expansion rather than contraction in this form of Chinese "soft power."

The designation of China as a major focus for educational efforts was recognized by President Obama during his visit to Beijing in 2009 when he promised to send 100,000 American students to China over the next four years. A State Department spokesman subsequently explained the presidential initiative by observing that "China will have a much more important voice in world affairs in the coming years, and we need more Americans who can speak the language, who understand China, and who can do business more effectively with the Chinese."<sup>73</sup> Secretary of State Hillary Clinton, First Lady Michelle Obama, and former U.S. Ambassador to China Jon Huntsman all spoke out in favor of the proposal. In contrast to the Chinese government, however, which puts impressive sums of money behind its global educational initiatives, the U.S. government provided no new funding to back up Obama's call. Instead,

 <sup>&</sup>lt;sup>70</sup> "Students and the Party: Rushing to Join," *The Economist* (February 22, 2014). See also Gang Guo, "Party Recruitment of College Students in China," *Journal of Contemporary China*, vol. 14, no. 43 (May 2005) 387-390.
 <sup>71</sup> <u>http://www.hanban.edu.cn/confuciousinstitutes/node\_10961.htm</u> (Accessed March 13, 2015)

<sup>&</sup>lt;sup>72</sup> http://confuciusinstitute.unl.edu/institute (Accessed December 27, 2013)

<sup>&</sup>lt;sup>73</sup> *The Chronicle of Higher Education* (November 18, 2009).

Hillary Clinton announced the establishment of an independent non-profit foundation, named the 100 Thousand Strong Foundation, whose purpose is to encourage philanthropic and corporate donations in support of the initiative. The Ford Foundation contributed one million dollars in seed money to kick off what so far has been a lackluster fund-raising drive (with the Bank of China pledging more to the effort than American corporations). Meanwhile, the PRC government has earmarked 20,000 of its own China Scholarship Council fellowships to underwrite the Obama initiative!<sup>74</sup> What accounts for the Chinese state's unusual support for higher education, especially when compared to India? In the late 1940s,the world's two largest polities – independent India and the PRC – came into being. Over the next three decades, the economic trajectories of the two countries did not diverge markedly and indeed by the early 1980s India had a more developed higher education system, in part because China's higher education system had been severely damaged by the ravages of the Cultural Revolution. However, there was one glaring difference between the two countries: China had established a much more egalitarian human capital base through universal primary education and better public health compared to India's feeble record.

Over the next few decades the economic trajectories of the two countries diverged strikingly. Although India's growth was impressive, for a large country China's growth was unprecedented in human history. As India struggled to deliver universal primary education, its deeply inegalitarian social structures produced a distributive politics that undermined its higher education system. In China's case, the very political forces that drove its remarkable growth also underpinned the transformation of its higher education system.

The differences in higher education reform between the two Asian giants can be traced to political factors, some of which are deeply rooted in political culture and others of which are a product of their contemporary political systems. The disparities belie simple-minded arguments about democratic regimes enjoying more progressive educational policies than autocracies, however. Indeed, to the extent that for democracies the primary basis for legitimacy is procedural whereas authoritarian governments must demonstrate positive policy performance in order to retain public approval (especially as the legitimating halo of revolutions dim), one might *a priori* expect authoritarian China to "deliver" better economic outcomes than democratic India. If so, the divergent outcomes in higher education in the two countries are not so surprising after all.

<sup>&</sup>lt;sup>74</sup> <u>http://www.state.gov/p/eap/rls/ot/2012/191333.htm</u> (Accessed December 27, 2013)



Figure 1a Gross Enrollment Ratio in Secondary Education (% of age cohort)

Source: UNESCO, Institute for Statistics



Figure 1b Enrollment in Secondary Education (millions)

Source: UNESCO, Institute for Statistics



Figure 2a Gross Enrollment Ratio in Tertiary Education (% of age cohort)

Figure 2b Enrollment in Tertiary Education (millions)



Source: UNESCO, Institute for Statistics

Source: UNESCO, Institute for Statistics

		China	India
	Based on PPs	13496	5758
Expenditure (US\$, billions)		7322	1864
	Based on PPs	10057	4735
Expenditure per capita (US\$) Base		5456	1533
Price level index (World =100)		70	42
	Based on PPs	75	35
(World =100)	Based on XRs	52	15
	Based on PPs	20	10
(US=100)	Based on XRs	11	3
	Based on PPs	15	6
Expenditure	Based on XRs	10	3
Population		20	18
	US\$, billions) Der capita (US\$) dex (World =100) (World =100) (US=100) Expenditure Population	Based on PPs Based on XRs Based on XRs Based on XRs Based on XRs Based on XRs Based on PPs (World =100) Based on XRs Based on PPs (US=100) Based on XRs Based on PPs Based on PPs Based on PPs Based on XRs Based on PPs Based on XRs Based on XRs Based on XRs	ChinaBased on PPs13496US\$, billions)Based on XRs7322Based on XRs7322Based on PPs10057Der capita (US\$)Based on XRs5456dex (World =100)70Based on PPs75(World =100)Based on XRs52Based on PPs20(US=100)Based on XRs11Based on PPs15ExpenditureBased on XRs10Population20

# Table 1: Purchasing Power in China and India

Source: World Bank, 2011 International Comparison Program (ICP), 2014.

	Institutions providing graduate programs 研究生培养机构	Regular HEIs 普通高校	Number of regular HEIs that are private (民办)	HEIs for Adults 成人高等学校	Other Non- state/private HEIs 民办的其他高等教育机构
2003	720	1552	173	558	1104
2004	769	1731	226	505	1187
2005	766	1792	250	481	1077
2006	767	1867	276	444	994
2007	795	1908	295	413	906
2008	796	2263	638	400	866
2009	796	2305	656	384	812
2010	797	2358	674	365	836
2011	755	2409	696	353	830
2012	811	2442	706	348	not listed
2013	830	2491	717	297	802

#### Table 2. Number of higher education institutions in China

Sources:

For 2003-2010: "高等教育学校 (机构) 数 ("Number of Higher Education Institutions")," in

中国教育统计年鉴2003-2010

For 2011: Ministry of Education, "高等教育学校(机构)数,"

www.moe.gov.cn/publicfiles/business/htmlfiles/moe/s7382/201305/152554.html Accessed April 3, 2014 For 2012: Ministry of Education, "高等教育学校(机构)数,"

http://www.moe.gov.cn/publicfiles/business/htmlfiles/moe/s7567/201309/156873.html Accessed April 3, 2014 For 2013: Ministry of Education, "高等教育学校(机构)数,"

http://www.moe.gov.cn/publicfiles/business/htmlfiles/moe/s8493/201412/182068.html Accessed April 17, 2015

Graph 3a Number of Colleges in India



Source: National Mission on Higher Education



Figure 3b Number of Universities in India

Source: National Mission on Higher Education



Figure 3c Percentage of Different Types of Colleges

Source: National Mission on Higher Education

1.6 1.4 1.4 1.2 1 0.9 % GDP Elementary 0.8 0.8 Secondary 0.6 Higher 0.6 0.4 0.4 0.2 0.1 0 Expenditure by States Expenditure by Centre



Source: Analysis of Budget Expenditure



Figure 4b.Public Expenditure on Education by Level of Education

Source: Analysis of Budget Expenditure

Figure 4c India: Total public expenditure on tertiary educational institutions and administration as a % of GDP



Source: UNESCO, Institute for Statistics



Source: UNESCO, Institute for Statistics

# Table 3a. Number of Foreign Students in China by country, showing only top 10 countries for eachyear

	2011	2010	2009	2008
South Korea	62442	62957	64232	66806
United States	23292	19668	18650	19914
Japan	17961	16808	15409	16733
Thailand	14145	13177	11379	8476
Vietnam	13549	13018	12247	10396
Russia	13340	12481	10596	8939
Indonesia	10957	9539	7926	7084
India	9370	9014	8468	8145
Pakistan	8516	7406	5738	5199
Kazakhstan	8287	7874	6497	5666
Total	292611	265090	238184	223499

Sources: for 2011: Project Atlas report on "International Students in China,"

www.iie.org/Services/Project-Atlas/China/International-Students-In-China, accessed 4/2/2014

## Table 3b. Foreign Students in India, Top Ten Countries of Origin (2011)

Nepal	5044	18%
Iran	2589	9%
Afghanistan	2166	8%
Bhutan	1253	5%
Sudan	1166	4%
United States	1015	4%
China	951	3%
Iraq	891	3%
Sri Lanka	878	3%
Malaysia	830	3%
Total	27531	

Source: Higher Education Survey, 2011

Year	# of Chinese students	# of Indian students
1980-81	2770	9250
1985-86	13980	16070
1990-91	39597	28857
1995-96	39613	31743
2000-01	59939	54664
2005-06	62582	76503
2008-09	98235	103260
2009-10	127628	104897
2010-11	157558	103895
2011-12	194029	100270
2012-13	235597	96754

### Table 4a. Number of Foreign Students from China and India in the United States

Source: "Open Doors Fact Sheet: China" and "Open Doors Fact Sheet: India," Institute of International Education (2013) http://www.iie.org/Research-and-Publications/open-doors/data/fact-sheets-by-country/2013 Accessed April 2, 2014

#### Table 4b. Number of Foreign Students from China and India in the United Kingdom

Year	# of Students from China	# of students from India
2012/13	83790	22385
2011/12	78715	29900
2010/11	67325	39090
2009/10	56990	38500
2008/09	47035	34065

Source: "Table 6 - Top ten non-EU countries of domicile in 2012/13 for student enrolments on HE courses by location of HE institution and country of domicile 2008/09 to 2012/13," Higher Education Statistics Agency, www.hesa.ac.uk/content/view/1897/239/ Accessed April 9, 2014



Figure 5

Source: National Mission on Higher Education



