

The China Quarterly

<http://journals.cambridge.org/CQY>

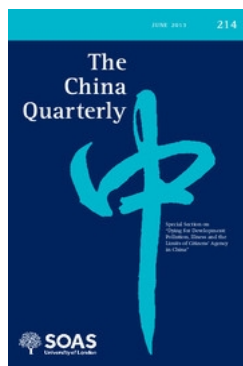
Additional services for *The China Quarterly*:

Email alerts: [Click here](#)

Subscriptions: [Click here](#)

Commercial reprints: [Click here](#)

Terms of use : [Click here](#)



College is a Rich, Han, Urban, Male Club: Research Notes from a Census Survey of Four Tier One Colleges in China

Xiaobing Wang, Chengfang Liu, Linxiu Zhang, Yaojiang Shi and Scott Rozelle

The China Quarterly / Volume 214 / June 2013, pp 456 - 470

DOI: 10.1017/S0305741013000647, Published online: 25 June 2013

Link to this article: http://journals.cambridge.org/abstract_S0305741013000647

How to cite this article:

Xiaobing Wang, Chengfang Liu, Linxiu Zhang, Yaojiang Shi and Scott Rozelle (2013). College is a Rich, Han, Urban, Male Club: Research Notes from a Census Survey of Four Tier One Colleges in China. *The China Quarterly*, 214, pp 456-470
doi:10.1017/S0305741013000647

Request Permissions : [Click here](#)

Research Report

College is a Rich, Han, Urban, Male Club: Research Notes from a Census Survey of Four Tier One Colleges in China*

Xiaobing Wang[†], Chengfang Liu[‡], Linxiu Zhang[§], Yaojiang Shi^{**} and
Scott Rozelle^{***}

Abstract

The opportunity to attend college and earn a degree has increased dramatically in China. However, that does not mean that everyone has an equal opportunity. Historically, there has been well-documented systematic discrimination against minorities, women and the rural poor. The main question of this paper is whether or not this discrimination has persisted since the recent expansion of China's tertiary education system. Using a census of incoming freshmen from four tier one universities, this paper assesses if certain types of students are over-represented while other types of students are under-represented. Comparing the shares of students from different socioeconomic and ethnic backgrounds from our primary survey data with government generated census statistics, we conclude that poor, minority and rural female students are systematically under-represented. In contrast, rich, Han, urban males are dominant in college.

Keywords: higher education; barriers; poverty; rural China; Asia

The opportunity to attend college and earn a degree has increased dramatically in China. Government appropriations for higher education have increased from 33.4 billion yuan in 1997 to around 164.8 billion yuan in 2007, an annual real growth rate of over 13 per cent.¹ Through this large-scale investment, more than 800 new comprehensive universities (or colleges – which will be the word used to cover both universities and colleges in the rest of the paper) and

* The authors would like to acknowledge the funding support from National Natural Sciences of China (71110107028) and the Institute of Geographic Sciences and Natural Resources Research, CAS (Grant: 2012RC102).

† Chinese Academy of Sciences.

‡ Chinese Academy of Sciences.

§ Chinese Academy of Sciences. Email: lxzhang.ccap@igsnr.ac.cn (corresponding author).

** Northwest University (Xi'an).

*** Stanford University.

1 NBS 1998, 2009.

professional colleges were founded, nearly doubling the number of tertiary institutions in China. The enrolment rate of colleges has also increased by more than five times from about 3 million students in 1997 to over 17 million in 2007.² Statistics from the Ministry of Education support these numbers. The aggregate gross enrolment rate at the higher education level increased more than sevenfold between 1990 and 2006, from 3.4 per cent to 22 per cent. This means that in 2006, more than one out of five students in the 18- to 22-year-old cohort had the opportunity to achieve a higher education.³

One reason for this expansion was to provide opportunities for a broader, more diverse set of students to attend college. There are many policy documents that explicitly state this as one of the goals of China's higher education policy. For example, in one policy, the Initiative for the Development of Chinese Women, China's leaders asserted that if women were ensured the right to pursue higher education, this would help make them more equal in political, economic, cultural, social and family affairs. Similarly, one of the goals of The Law of Higher Education (1998) is to help students from poor areas and students of minority ethnic origins in their pursuit of college degrees.

Although China has always maintained an ideology that has stated equality as one of its main goals, there has been research in the past that has questioned the effectiveness of these policy pronouncements, especially in the case of higher education. Emily Hannum et al. have shown that minorities have been systematically excluded from colleges.⁴ Yaohui Zhao has concluded that rural students have less of a chance to go to college than urban students.⁵ There is research on the challenges of women – even those with urban registered residence (*hukou* 户口) – being systematically squeezed out of certain disciplines in college.⁶ While these works clearly show that China's higher education institutions have not treated all students equally, most of the studies predate the recent expansion of the college system. There have been few studies that have examined China's renewed policy commitment (at least in principle) to provide educational opportunities for all. Among the studies that have addressed these issues, almost none have provided any systematic, evidence-based data on the topic.

The purpose of this research note is simple. We want to report on the results of a recent comprehensive survey of all incoming freshmen in four tier one colleges in Shaanxi, Sichuan, and Anhui. In this survey, we collected information that will allow us to categorize each student as: urban or rural (by *hukou* status); male or female; Han (汉) or non-Han; rich or poor. We then assessed if certain types of students (for example: Han, male, urban, rich, or some combination thereof) are over-represented while other types of students (for example, minorities, female, rural, or poor) are under-represented.

2 Ibid.

3 MOE 2008.

4 Hannum et al. 2008

5 Zhao 2007.

6 See Zhou, Moen and Tuma 1998.

The research note makes several contributions. First, we present material from a new set of primary data that was collected in 2009, almost a decade after the start of the expansion of China's university system in the late 1990s. Being collected from all freshmen (nearly 100 per cent of them) inside the particular university system, it provides information from a unique data collection exercise. According to the data, there are several original findings. First, we confirm that the under-representation of women and rural individuals documented by earlier studies continues – even after the expansion of the college system (that was, in part, done to eliminate such under-representation). Second, due to the nature of the data (which allow for identification of disaggregated groups of college students in a new way), we find that the gender bias documented by others is due (at least in our four tier one universities) to the under-representation of rural women; urban women are not under-represented. We find that rich rural individuals are not under-represented; those from poor areas are. Finally, we identify and quantify that the most under-represented group is poor, rural, minority women. Such individuals are in tier one colleges at less than one-fifth of their population share. The greatest degree of under-representation is in nationally supported tier one colleges (as opposed to provincially supported tier one colleges).

Data

In this paper we use a set of data that we collected in 2008. This survey is a complete census of all incoming freshmen at four colleges – two nationally supported colleges (Xi'an Jiaotong University 西安交通大学 and Sichuan University 四川大学) and two provincially supported colleges (Anhui University 安徽大学 and Northwest University 西北大学 in Xi'an).⁷ These four colleges are located in three poor provinces: Shaanxi, Sichuan and Anhui.⁸ For clarity, we call this survey the Four College Freshmen Survey.

7 The size of our budget and the time available to the research team defined the size of the study: we could only afford to survey and process the data from four universities. Given this budget constraint, we chose two provincially supported and two nationally supported universities. Two were in north-west China; one was in south-west China; one was in a poor part of central China. We also were particularly interested in understanding the composition of the student bodies in tier one universities, as Hongbin Li shows these to have the highest returns to income (Li 2011). Tier one universities are also where China is putting its investment, in its effort to transform the nation into an economy based on innovation-led growth (State Council, 1999). We are not saying this is going to happen. However, if it does, we are interested in understanding if the breadth of the population of China (urban/rural; male/female; Han/non Han; and poor/not poor) is participating. Today's inequality in human capital formation is also a sign of future income/social inequality. We included nationally and provincially supported universities since the two types of universities may have access to different types of funding; may admit students for different majors; and may have different admissions criteria.

8 The choice of these four universities is also appropriate given that they have expanded rapidly (in sync with the overall college system). In fact, there has been a large expansion in three of the four sample colleges. In 1994, the "old" Sichuan University merged with Chengdu Science and Technology University and in 2000 it merged with Huaxi Medical College. Before the mergers, each of the universities recruited around 2,000 freshmen. Since 2000, the "new" Sichuan University has recruited more than 10,000 freshmen per year. Since the late 1990s, Northwest University has grown from 2,400 undergraduates to 3,500 undergraduates (after 1999). The enrolment rate in Anhui University more than doubled from 2,480 students in 1998 to 5,000 students in 2008. Only in the case of Xi'an Jiaotong University was there not an expansion in size.

In order to implement the survey, we worked closely with the student affairs division of each college. The division head assigned a task force to make sure that the survey form was distributed to each student at some point during the first week of the academic year. Within each college, a set of survey forms was distributed to each class captain (*banzhuren* 班主任), which is the equivalent of a homeroom teacher in US high schools. Students were informed that the surveys were voluntary, anonymous, and that the information in them would only be used for research purposes. The students returned the completed forms to their class captain, who relayed the forms to the student affairs office by the end of the second week of September. The response rate was over 99 per cent.

The content of the survey was relatively simple. We asked each student a series of questions about their own unique characteristics and a set of questions about their poverty status. Specifically, we asked for the students' gender, ethnicity and *hukou* status. We also asked for the province and county of their birth and the province and county in which they attended high school. From this we were able to determine if the student was from a county that was a nationally designated poor county.

One of the main uses of the student survey was for collecting information that could identify students that were truly poor. In addition to the questions described in the previous paragraph, each student also was asked to fill out a checklist of the durable assets owned by his or her household. Once a value was attached to each asset (based on the national Household Income and Expenditure Survey which is organized and published by the China National Bureau of Statistics), we were able to have a single metric of the value of the asset holdings of each student's household.⁹

We surveyed a total of 20,253 students. Sichuan University had by far the most students, at over 8,800. The number of surveyed students from the other colleges ranged from 3,000 at Northwest University to 4,900 at Anhui University (Table 1).¹⁰

Access to Higher Education in China

In order to use our data to assess whether or not different groups of students have been gaining equal access to college, we compare the enrolment rates of these student groups with their share of the population as a whole. We are, of course, comparing students who are 19 years of age (plus or minus one or two years) with those in the general population that are in the same age cohort (14- to 22-year-olds). Our assessment of whether or not a particular group is under- or over-represented depends on whether or not the share of that group in the total

9 NBS 2007.

10 Because Sichuan University has the most weight in the sample (due to its large size), in a robustness check (not shown for brevity) we have redone the analysis with a random subset of the Sichuan University data, making it have an equal number of observations as the other universities (e.g. $n = 4,000$). The general findings of the study do not change materially when we do this.

Table 1: **Distribution of Sample Freshmen by University**

University	Number of students	As a percentage of sample
Sichuan University	8751	43.6
Anhui University	4893	24.4
Northwest University	3015	15.0
Xi'an Jiaotong University	3400	16.9
Total	20059	100

Source:

Authors' Four College Freshmen Survey.

incoming freshman class is smaller or larger than the share of that group in the population as a whole. For example, if males make up 60 per cent of the incoming class, but only 54 per cent of the 19-year-old cohort in the population at large, they would be over-represented in college and females would be under-represented.

Alternatively, we can also calculate the ratio of the share of a specific group (e.g. rural students) in the overall enrolment rate of the sample colleges. The ratio can be used to compare the share of the same group in the population as a whole to the share of the similar age-cohort generation in the population, respectively. If the ratio is less than 1, it means this group is under-represented in the college education system. If the ratio is larger than 1, it means this group is over-represented in the college education system.

Rural versus urban

Although national education statistics materials do not include a breakdown of the share of students from rural or urban areas, statistics based on data from our Four College Freshmen Survey show that across all colleges (in our sample) there is a tendency to admit relatively more urban students. The enrolment rates of students from urban and rural areas are almost exactly the same (Table 2, column 5 and 7, rows 1). However, the shares of population in urban and rural areas are not. In China today, 45 per cent of the population is categorized as urban while 55 per cent of the population is considered rural, with rural *hukou* status.¹¹ Looking at the 14 to 22 age cohort, there is a similar split between urban and rural. Since the share of rural cohort in the total population (or in the nation's total 14- to 22-year-old population) is larger than the share of the students from rural areas (50 per cent), this means that rural students are under-represented. The share of rural college students is 6 percentage points lower than its corresponding population share. Of course, this also means that urban students are over-represented. Another way of characterizing this over-representation is by noting that the ratio of the share of students from urban areas to the share of the urban population in China's overall population is greater than 1 (1.13).

11 NBS 2003.

Table 2: The number and percentage of the freshmen by urban and rural areas

	All (Urban + Rural)		Urban		Rural	
	No.	%	No.	%	No.	%
Sample [A] (number of students) ^a	20059	100	10028	50.0	10031	50.0
All (million persons) ^b	1321	100	594	44.9	728	55.1
Age 14–22 [B] (million persons) ^b	186	100	82	44.1	104	55.9
Ratio [A/B]				1.13		0.89

Notes:

^a The unit of observation in the sample is “number of students.”

^b The unit of observation are “million persons.” These represent the total number of persons in China/urban and rural (row 2); and the number of persons in the 14–22 age cohort/urban and rural (row 3).

Source:

Data are from the authors’ Four College Freshmen Survey (row 1); the national data are from *China’s Population and Employment Statistical Yearbook* (NBS, 2008 – rows 2 and 3).

While the gap (6 percentage points) is significant when comparing the share of urban to rural population China as a whole, it is even larger if we use urbanization rates from only Sichuan, Shaanxi and Anhui provinces. In this case we use the data from the home provinces of the colleges in our sample. Using data on the share of the 14- to 22-year-old cohort that are from urban areas in Sichuan, Shaanxi and Anhui, the share of urban students in the Four College Freshmen Survey is 18 percentage points greater (statistics are not shown in the tables for the sake of brevity).^{12,13}

Dividing the data by nationally supported colleges (Sichuan University and Xi’an Jiaotong University) and provincially supported colleges (Northwest University and Anhui University) we see that the urban bias is, in fact, completely driven by the more elite, nationally supported colleges (Table 3, rows 1 to 3; columns 4 to 7). As per the discussion above, across all four of the colleges the representation ratio (1) shows that urban students are over-represented.

12 In fact, this is not an extreme assumption. It is well known that Shaanxi province (especially Xi’an) is relatively well endowed with universities and colleges. To the extent that universities within a province give preference to students from the province, this would mean that we are providing conservative estimates of the biases against students from rural area.

13 It is unclear if we should use population shares from the entire nation or just from the three provinces. If we had information on enrolment rates from the entire country (instead of only from four universities), we would of course use the national population shares. Unfortunately, we do not have a national representative sample. In contrast, if universities only recruited students from their own host provinces, then the right number to use would be those from the three provinces. However, universities do recruit students from the entire country. In fact, according to our data, 53 per cent of the students (47 per cent of rural students and 59 per cent of urban students) in the four universities are from outside of the province. Consequently, it is unclear what is the right number to use. Because most of the rural students are recruited from within the province, in the rest of the paper we use the population shares from the three provinces only – except where otherwise noted.

Table 3: The Number and Percentage of Freshmen by University and by Urban or Rural Areas

	All four universities		National university ^b		Provincial university ^c	
	No.	%	No.	%	No.	%
Sample (number of students) ^a	20059	100.0	12151	60.6	7908	39.4
Urban [A] (number of students) ^a	10028	50.0	6752	33.7	3276	16.3
Rural [B] (number of students) ^a	10031	50.0	5399	26.9	4632	23.1
Ratio [A/B]		1.00		1.3		0.71

Notes:

^a The unit of observation in the sample is “number of students.”

^b National universities refer to Xi’an Jiaotong University and Sichuan University;

^c Provincial universities refer to Northwest University and Anhui University.

Source:

Data are from authors’ Four College Freshmen Survey.

Significantly, in our sample’s provincially supported colleges, the ratio is actually less than 1 (0.71). This means that provincially supported colleges have relatively more rural students. In contrast, in the sample’s nationally supported colleges, the representation ratio of the share of urban students to the population share of urban students is 1.3. From this it is clear that the over-representation of urban students in our sample is fully driven by nationally supported colleges.

Male versus female

The data from the Four College Freshmen Survey also demonstrate that males are over-represented (Table 4, rows 1 to 4). According to our data, the share of female students in the sample is 41 per cent. However, the share of the population in the 14- to 22-year-old cohort is 48 per cent. This means that women are under-represented by 7 percentage points. The representation ratio is less than 1 (0.85). When examining the nationally supported colleges (not shown) it is clear that here, too, there is more of a bias against female students. The representation ratio is only 0.80 in nationally supported colleges and 0.94 in provincially supported colleges.

When dividing the sample by urban/rural status and gender, we see that the under-representation of women in the Four College Freshmen Survey is due to the fact that rural women attend colleges at a rate far lower than their population share (Table 5, rows 5 to 12). In fact, the representative ratio of urban males, urban females and rural males are almost the same, ranging between 1.13 and 1.14. The ratio of the share of rural female students who attend college to the share of the women in the 14 to 22 age cohort is only 0.63. In our sample, rural women make up only 17 per cent of the entire sample (3,373/20,059). By

Table 4: The Number and Percentage of Freshmen by Gender and by Universities

	All (Male + Female)		Male		Female	
	No.	%	No.	%	No.	%
All four universities						
Sample [A] (number of students) ^a	20059	100.0	11832	59.0	8227	41.0
All (million persons) ^b	1321	100.0	670	50.7	651	49.3
Age 14–22 [B] (million persons) ^b	186	100.0	96	51.9	89	48.1
Ratio [A/B]				1.14		0.85
National universities						
Sample [A] (number of students) ^a	12151	100.0	7488	61.6	4663	38.4
All (million persons) ^b	1321	100.0	670	50.7	651	49.3
Age 14–22 [B] (million persons) ^b	186	100.0	96	51.9	89	48.1
Ratio [A/B]				1.19		0.80
Provincial universities						
Sample [A] (number of students) ^a	7908	100.0	4344	54.9	3564	45.1
All (million persons) ^b	1321	100.0	670	50.7	651	49.3
Age 14–22 [B] (million persons) ^b	186	100.0	96	51.9	89	48.1
Ratio [A/B]				1.06		0.94

Notes:

^a The unit of observation in the sample is “number of students.”

^b These are total population and population at the age of 14–22 at the national level in 2007; the unit of the data at the national level is “million persons.”

Source:

Sampled data are from the authors’ Four College Freshmen Survey; the data at the national level in 2007 are derived from *China’s Population and Employment Statistical Yearbook* (NBS, 2008).

contrast, rural women make up 27 per cent of China’s population of 14- to 22-year-olds. In fact, the low share of women in college is not surprising. Kipnis noted that parents in rural areas (even well off ones, like those in Shandong, the location of his study) often do not encourage their daughters to go to high school.¹⁴ If the high school enrolment rates of girls are low, the college rates will also necessarily be low. His conclusion is mirrored by Hannum; in poor rural areas of China girls, particularly those from resource-limited families, are still disadvantaged in education, enrolment and transition to upper secondary education.¹⁵ Nevertheless, many researchers have demonstrated that the educational performance of girls has

14 Kipnis 2001.

15 Hannum 2005.

Table 5: **The Number and Percentage of Freshmen by Urban or Rural areas and by Gender**

	All (Male + Female)		Male		Female	
	No.	%	No.	%	No.	%
Sample [A] (number of students) ^a	20059	100.0	11832	59.0	8227	41.0
All (million persons) ^b	1321	100.0	670	50.7	651	49.3
Age 14–22 [B] (million persons) ^b	186	100.0	96	51.9	89	48.1
Ratio [A/B]				1.14		0.85
Urban						
Sample [A] (number of students) ^a	10028	50.0	5174	25.8	4854	24.2
All (million persons) ^b	590	44.7	296	22.4	294	22.3
Age 14–22 [B] (million persons) ^b	82	44.1	42	22.7	40	21.5
Ratio [A/B]		1.13		1.14		1.13
Rural						
Sample [A] (number of students) ^a	10031	50.0	6658	33.2	3373	16.8
All (million persons) ^b	731	55.3	374	28.3	357	27.0
Age 14–22 [B] (million persons) ^b	104	55.9	54	29.3	49	26.6
Ratio [A/B]		0.89		1.13		0.63

Notes:

^a The unit of observation in the sample is “number of students”.

^b These are total population and population at the age of 14–22 at the national level in 2007; the unit of the data at the national level is “million persons”.

Source:

Sampled data are from the authors’ Four College Freshmen Survey; the data at the national level in 2007 are derived from *China’s Population and Employment Statistical Yearbook* (NBS, 2008).

gradually become more comparable with (and even exceeds) that of boys (both around the world and in China’s large cities).¹⁶

Han versus non-Han

The largest rates of under-representation, however, are for ethnic minorities. When comparing Han to non-Han, we can see that minorities, especially lesser minorities (as opposed to the six large minorities, Zhuang 壮, Manchu 满, Hui 回, Miao 苗, Uyghur 维吾尔 and Tujia 土家), are under-represented (Table 6,

16 See Mather and Adams. 2007; Lai 2010.

Table 6: The Number and Percentage of Freshmen from Rural Areas by Ethnicity and by Gender

	All (Male + Female)		Male		Female	
	No.	%	No.	%	No.	%
Sample [A] (number of students) ^a	10031	100.0	6658	66.3	3373	33.7
All (million persons) ^b	784	100.0	405	51.7	379	48.3
Age 14–22 [B] (million persons) ^c	149	100.0	78	52.2	72	47.8
Ratio [A/B]		1.00		1.27		0.71
			Han			
Sample [A] (number of students) ^a	9617	95.9	6372	63.5	3245	32.4
All (million persons) ^b	703	89.7	363	46.3	340	43.4
Age 14–22 [B] (million persons) ^c	134	89.4	70	46.7	64	42.7
Ratio [A/B]		1.07		1.36		0.76
			Six Major Minorities			
Sample [A] (number of students) ^a	251	2.5	182	1.8	69	0.7
All (million persons) ^b	46	5.8	24	3.0	22	2.8
Age 14–22 [B] (million persons) ^c	9	6.1	5	3.2	4	2.9
Ratio [A/B]		0.41		0.56		0.24
			Other Minorities			
Sample [A] (number of students) ^a	163	1.6	104	1.0	59	0.6
All (million persons) ^b	35	4.5	18	2.3	17	2.2
Age 14–22 [B] (million persons) ^c	7	4.5	4	2.3	3	2.2
Ratio [A/B]		0.36		0.43		0.27

Notes:

^a The unit of observation in the sample is “number of students.”

^b These are total rural population at the national level in 2000 in the unit of million persons. ^c These are rural population at the age of 14–22 at the national level in 2008 in the unit of million persons. These figures are calculated by the population between the age of 6 and 14 in 2000. Here we ignore the death rate of the population in this age cohort during 2000–2008, and thus these figures could be overestimated.

Source:

Sampled data are from authors’ Four College Freshmen Survey; the data at the national level are derived from *The Tabulation on Nationalities of 2000 Population Census of China* (NBS 2003).

columns 2 and 3).¹⁷ Rural China's 14- to 22-year-old cohort is 89.4 per cent Han. However, 95.9 per cent of the Four College Freshmen Survey students were Han. This means, of course, that the representative ratios for non-Han are small. The ratio of the six large minorities is 0.41. The ratio of the other lesser minorities is 0.36. Our results are consistent with the conclusion by Hannum and Park; the gap between Han and non-Han is fundamentally a rural problem.¹⁸

These ratios are even smaller in the case of rural female minority students (Table 6, columns 6 to 7). For example, the representative ratio of rural minority female students (for the six large minorities) is only 0.24. The same number for the other lesser minorities is 0.27 per cent. Clearly the share of rural minority females who are able to attend one of the four sample colleges is around one quarter of its population share.

Poor versus non-poor

Poor students also are under-represented, especially rural poor students (not shown for brevity). In the analysis, poor students refer to the students from the nationally designated poor counties. When looking at the data from our Four College Freshmen Survey, the representative ratio for students from poor rural areas is 0.81. Students, especially those from poor rural areas, are under-represented in China's colleges, according to our study.

The lowest ratio is for female, minority students from poor rural areas (see Table 7). The ratio of the share of female, minority students from poor rural areas to their age cohort share ranges from 0.16 (for the six large minorities) to 0.15 (for the other lesser minorities). Indeed, in our sample of more than 20,000 college students, only 42 were female minorities from poor rural areas (25 from the six large minorities and 17 from the other lesser minorities). Based on data in the *Educational Statistics Yearbook of China*, Zhu Zhiyong points out that the percentage of ethnic minority students enrolled in college (institutions of higher education) is still below the percentage of minorities in the nation's population.¹⁹ Consistent with Hawkins et al. and Postiglione, our results indicate that although tertiary enrolments have increased substantially, these government statistics typically do not reveal the enduring inequities, i.e. minorities, especially those involving females in rural poor areas, have few opportunities for access to upper tier universities, most of which are state funded.²⁰

Conclusion

It is generally understood that education is important and benefits societies as well as individuals. Thus, the question of "who gets higher education" assumes

17 The populations of each of the six major minority nationalities are more than 8 million.

18 Hannum and Park 2007.

19 Zhu 2010.

20 Hawkins et al. 2009; Postiglione 2009.

Table 7: The Number and Percentage of Freshmen from Rural Areas by Poor and Non-poor Counties, Ethnicity and Gender

	Non-Poor ^a						Poor ^a					
	All (Male + Female)		Male		Female		All (Male + Female)		Male		Female	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
All Ethnicities												
Sample [A] (number of students) ^c	8087	80.6	5256	52.4	2831	28.2	1944	19.4	1402	14.0	542	5.4
All [B] (million persons) ^c	596	76.1	307	39.2	289	36.9	188	23.9	98	12.5	90	11.5
Ratio [A/B]		1.06		1.34		0.77		0.81		1.12		0.47
Han^b												
Sample [A] (number of students) ^c	7854	78.3	5109	50.9	2745	27.4	1763	17.6	1263	12.6	500	5.0
All [B] (million persons) ^c	558	71.2	288	36.7	270	34.5	145	18.5	76	9.7	69	8.9
Ratio [A/B]		1.10		1.39		0.79		0.95		1.30		0.56
Six Major Minorities^b												
Sample [A] (number of students) ^c	129	1.3	85	0.8	44	0.4	122	1.2	97	1.0	25	0.2
All [B] (million persons) ^c	21	2.7	11	1.4	10	1.3	25	3.1	13	1.6	12	1.5

Continued

Table 7: Continued

	All (Male + Female)		Non-Poor ^a				Poor ^a					
			Male		Female		All (Male + Female)		Male		Female	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Ratio [A/B]		0.48		0.60		0.34		0.39		0.59		0.16
					Other Minorities^b							
Sample [A] (number of students) ^c	104	1.0	62	0.6	42	0.4	59	0.6	42	0.4	17	0.2
All [B] (million persons) ^c	17	2.2	9	1.1	8	1.1	18	2.3	9	1.2	9	1.1
Ratio [A/B]		0.48		0.57		0.40		0.26		0.35		0.15

Notes:

^a Poor means the people are living in the Nation-designated poor counties. Non-poor means the people are not living in the Nation-designated poor counties.

^b Han means Han ethnicity; six major minorities include Zhuang, Manchu, Hui, Miao, Uyghur, Tujia minority nationalities (the populations of each of these six major ethnic groups are more than 8 million); other minorities means people from other minority nationalities but not the above-mentioned seven ethnic groups in China

^c The unit of observation in the sample is “number of students.” The unit of the population at the national level is “million persons.”

Source:

Sampled data are from the authors' Four College Freshmen Survey; data at the national level are derived from *The Tabulation on Nationalities of 2000 Population Census of China* (NBS 2003).

a central place in the historically important issue of social inequality. Based on a census survey in four tier one colleges in China and government census statistics, we examined the impact of higher educational expansion patterns on the attainment of higher education by the location of residence, gender, ethnicity and socioeconomic status. In terms of educational inequalities, the rural–urban gap still exists, especially in the national colleges. Gender disparities are exacerbated when combined with minority ethnicity. Moreover, students from poor rural areas are more under-represented in access to college compared to their counterparts from rich rural areas. These facts suggest that even under the substantial expansion in higher education from the supply side, the inequality of access to higher education at the demand side still exists. This inequality is related to certain characteristics of the prospective student, such as being rural or urban, male or female, Han or non-Han, rich or poor. This leads us to our conclusion that today’s Chinese college is still a rich, Han, urban and male club.

Are there institutional features that can be identified as leading to (or minimizing) the under-representation of rural and minority students? If we compare the course offerings (as seen in the presence or absence of departments or colleges) of nationally supported and provincially supported tier one colleges, can we observe that there are more courses/sets of courses that might be more attractive to rural/minority students in provincially supported universities?

In general, this does not seem to be the case. The breadth of colleges and departments and majors are largely the same. This would seem to suggest that there is – for some reason (perhaps more structural) – discrimination against under-represented groups.

However, if one looks closely it is possible to identify a relatively modest number of disciplines offered in provincially supported universities (in the case of this paper – Northwest University and Anhui University) that might be somewhat attractive to rural students (one of the under-represented groups). In Anhui University, for example, students can major in land resource management, tourism management and labour/social security. In Northwest University there are offerings of resource exploration, food science and geology.

Hence, while there are almost certainly more systematic factors accounting for the less representative nature of nationally supported universities, course offerings may explain part of the gap. Also, in drawing this conclusion, we must caution the reader that the findings from our review of department and college offerings from the four sample universities is too small to state systematically that this one of the ways that China could correct the under-representation of rural and minority students. But, the findings of our survey of offerings should help encourage other researchers to view this as an area of future research and a potential source of future policy action.

References

- Hannum, Emily. 2005. “Market transition, education disparities, and family strategies in rural China: New evidence on gender stratification and development.” *Demography* 42(2), 275–299.

- Hannum, Emily, and Albert Park, 2007. "Academic achievement and engagement in rural China." In Emily Hannum and Albert Park (eds.), *Education and Reform in China*. New York: Routledge, 154–172.
- Hannum, Emily, Jere Behrman, Meiyang Wang, and Jihong Liu. 2008. "Education in the reform era." In Loren Brandt and Thomas G. Rawski (eds.), *China's Great Economic Transformation*. Cambridge: Cambridge University Press, 215–249.
- Hawkins, John, James Jacob and Wenli Li. 2009. "Higher education in China: access, equity, and equality." In Donald Holsinger and James Jacob (eds.), *Inequality in Education: Comparative and International Perspectives*, 215–239.
- Kipnis, Andrew. 2001. "The disturbing educational discipline of peasants." *The China Journal* 46, 1–24.
- Lai, Fang. 2010. "Are boys left behind? The evolution of the gender achievement gap in Beijing's middle schools." *Economics of Education Review* 29 (3), 383–99.
- Li, Hongbin. 2011. "China's universities at the turn of the century." Paper presented at Stanford University, California, January 2011.
- Mather, Mark, and Dia Adams. 2007. "The crossover in female and male college enrollment rates." Population Reference Bureau report, <http://www.prb.org/Articles/2007/CrossoverinFemaleMaleCollegeEnrollmentRates.aspx>
- MOE (Ministry of Education) 2008. *Educational Statistics Yearbook of China*. Beijing: People's Education Press.
- NBS (National Bureau of Statistics of China). 1998. *China Statistical Yearbook*. Beijing: China Statistics Press.
- NBS. 2003. *The Tabulation on Nationalities of 2000 Population Census of China*. Beijing: Ethnic Publishing House.
- NBS. 2007. *China's Population and Employment Statistical Yearbook*. Beijing: China Statistics Press.
- NBS. 2008. *China's Population and Employment Statistical Yearbook*. Beijing: China Statistics Press.
- NBS. 2009. *China Statistical Yearbook*. Beijing: China Statistics Press.
- Postiglione, Gerard. 2009. "The education of ethnic minority groups in China" In James Banks (ed.), *The Routledge International Companion to Multicultural Education*, New York and London: Routledge, 501–511.
- State Council. 1999. "Action Plan for Invigorating Education in the 21st Century." Beijing: State Council Information Office.
- Zhao, Yaohui. 2007. "Labor migration and returns to rural education in China." *American Journal of Agricultural Economics* 79 (4), 1278–287.
- Zhou, Xuegang, Phyllis Moen and Nancy Tuma. 1998. "Educational stratification in urban China: 1949–94." *Sociology of Education* 71 (3), 199–222.
- Zhu, Zhiyong. 2010. "Higher education access and equality among ethnic minorities in China." *Chinese Education and Society* 43 (1), 12–23.