The Influence of Ethnic Minority Demographics on Provincial Preferential Policy Making in the Chinese College Admission System*

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Abstract

This study focuses on the various provinces' preferential policies towards ethnic minorities in the Chinese college admission system, specifically in term of bonus points awarded in the National College Entrance Examination. It explores how demographics of ethnic minorities in provinces influence provincial governments' preferential policy-making. By examining 31 Chinese provinces' population, education, economic data, and bonus point policies, this study finds that a higher percentage of minority population likely prompts provincial governments to make more generous and detailed policies. However, whether autonomous counties are significantly disadvantaged educationally (lower student enrollment rates in regular secondary school) and financially (lower GDP per capita) compared to regular counties does not seem to affect preferential policy making. Two noticeable outliers in the study are Sichuan province and Xizang (Tibet) Autonomous Region.

Introduction

Very few, if any, deny the role higher education attainment plays in upward social mobility. Many also believe that minorities, racial, ethnic etc., are disadvantaged in the process. Modern states with multiracial and multiethnic societies have widely adopted positive policies to redress historic inequalities among ethnic groups and the potential for ethnic conflict (Jalali and Lipset 1992). The People's Republic of China, with Han and 55 other government classified ethnic minority groups, is no exception.

Chinese college admission is based entirely on the National College Entrance Examination (NCEE, gaokao 高考). Though different provinces administer different exams, most of the exams have 750 points in total. In addition to the raw score received from the test,

some students may also receive bonus points because they are student athletes, nationwide academic competition winners, honors students (sanhao xuesheng 三好学生), children of overseas Chinese (huaqiao 华侨) or returned overseas Chinese (guiqiao 归侨), Taiwanese students, ethnic minorities etc.

The national policy that universities are supposed to "relax" their admission standards to an appropriate extent for ethnic minority students has legal bases (Postiglione 1999). Participation of ethnic minorities in higher education has been promoted in three ways (Min 1997). First, ethnic minorities are given enrollment priority – the admission standards in terms of scores on the NCEE have been adjusted by the government. Bonus points awarded to minority applicants, however, have been steadily decreasing. The government has been encouraging minority student to engage in "self-strengthening" (ziqiang 自强), with the hope that bonus points based on minority status will not be needed eventually. Second, starting in 1980, some national universities have established special preparatory classes for minority groups due to a Ministry of Education of China's requirement. Ethnic minority students enrolled in the university with scores lower than the minimum are required to go through one or two years of preparatory studies before being integrated into the regular student body. Third, nationality institutes that mostly admit ethnic minority students have been established. Even with all these efforts, minorities are still not well-represented in higher education, especially in top-tier universities. In this paper, I focus on the first method mentioned above. Thus, "preferential policies" in the following texts only refers to the practice of bonus points if not specified. With the general trend of decentralization in educational governance (Mok 2002), provincial governments in China have deployed various preferential policies towards ethnic minorities – offering different amount of points based on different criteria.

Although they only constitute 8.49% of the population, ethnic minorities not only demonstrate their specialness in the college admission system, but also through China's administrative subdivision. An autonomous region (AR, zizhiqu 自治区) is a minority entity that has a higher population of particular minority ethnic groups. Same as a province, AR is a first-level administrative subdivision with its own government (see Appendix Map.1 for a map of China including provinces and ARs). This type of entity exists for smaller administrative units as well. After AR (from the biggest to the smallest), there are autonomous prefecture, autonomous county, and autonomous township.

Scholars, policy makers, and average citizens have discussed consistently the equality of educational opportunity as a social issue. However, in China's case with the specific regard to ethnic minorities, the equality of educational opportunity is rarely discussed in a rigorous way supported by data. Focusing on higher education, I want to explore why preferential policies towards ethnic minorities differ across provinces in Chinese college admissions. Specifically, why do provinces have different bonus points for ethnic minorities in the NCEE? Some may think that one point in NCEE does not matter that much. However, since college admission is solely based on points, one point might put a student right on the cutoff to be admitted to the ideal school. At the same time, because many applicants taking the exam each year, a one point increase sometimes can put an applicant in front of another 600 people in the overall ranking in a province. Since most of the provinces offer at least five bonus points to ethnic minority students, they have a huge advantage in the admission process, which indicates the importance of deepening our understanding of provinces' preferential policies. In the following section, the literature review starts with the foundation of the concept of equality of educational opportunity

that originated in the U.S., and then presents the big picture of education and ethnic minorities in China, and specifically discusses higher education and preferential policies at last.

Educational Inequality and Ethnic Minorities in China

Equality of Educational Opportunity

Throughout the history of U.S. education, scholars have provided various conceptualizations of equality of educational opportunity, but failed to agree on a universally applicable definition. Nevertheless, two schools of thought, originated with Thomas Jefferson and Horace Mann, mostly dominate researchers' ideas of what constitutes an equal educational opportunity. The cleavage between the two camps is this: do scholars define equality based on input or output of education? The trend from Jefferson places emphasis on input, whereas the trend from Mann is concerned with equal output. Jefferson emphasized the equality of all men and their right to be educated (Ulich 1965). Mann stressed that equal attainment, or outcome, is possible. Scholars do not necessarily separate the two from each other, and many of them incorporate both concepts into their studies.

The Coleman Study (1966), the product of an extensive survey requested by the Civil Rights Act of 1964, identifies the following four types of inequalities: (1) differences of community's input to the school; (2) different racial composition of the school; (3) various intangible characteristics of the school as well as the factors directly traceable to the community inputs to the schools; (4) consequences of the school for individuals with equal backgrounds and abilities. The first and the third definitions are directly related to Jefferson's idea of input. The last definition focuses on Mann's ideal of equality of result but at the same time works on the premise of same individual input.

Wise (1972) proposes nine definitions of equal educational opportunity, each of which is concerned with either inputs or outputs of students. One might be surprised that different researchers' categorizations of these definitions are different. They agree that the negative definition, the foundation definition, the competition definition, the equal-dollars-per-pupil definition, and the maximum-variance-ratio-definition are definitely dealing with educational inputs. In addition, the minimum attainment definition counts towards the output category. Takase (1999) claims that the definition of leveling – resources should be allocated in inverse proportion to students' ability based on the assumption that students should as nearly as possible leave school with an equal chance of success, talks about outputs. However, in his overview, Nwaguogu (1984) identifies two other definitions concerning outputs: the full-opportunity definition – all persons are to be given full opportunity to develop their abilities to their limit, and the classification definition – equality for all within a classification based on the general idea of "the equal treatment of equals". One take away from this comparison is that the two schools of thought can sometimes be intertwined when talking about more specific policies.

Levin (1976) and Garms et al. (1978) assess equality of educational opportunity according to the following four standards: (1) equality of educational access; (2) equality of educational participation; (3) equality of educational results; and (4) equality of educational effects on life changes. Clearly, the four criteria fit into the two main camps – the former two focusing on inputs, and the latter two on outputs. Nwabuogu (1984) presents these four standards in a step-wise diagram showing the evolution of measures of equal educational opportunity over time, which is in accord with the sequence presented above. The first criterion is the most traditional, more easily-achievable measure of equal educational opportunity, and the last criterion is the most advanced, least attainable measure. As society prospers politically,

economically, and socially, the move towards equalizing resource inputs and individual achievements begin to emerge.

Similarly, Green (1980) advances the two views, calling them "the best principle" and the "equal principle". The former shares Jefferson's ideal, claiming the right to receive individualized education that is the best for each child, whereas the latter aligns with Mann's ideal of the right to receive an equal education for everyone. The two principles are not necessarily mutually exclusive, according to Kurosaki (1995), which is consistent with our observation about the Wise definitions and the time process Nwaguogu (1984) presents.

From the scholarly works mentioned above, one can see that the two trends clearly focus on different criteria of equal educational opportunity. However, researchers have been incorporating both ideas into their conceptualizations. Thus, when examining specific policies, scholars should not overlook either side. An approach that balances the two competing values may render better results. Although the literature discussed above does not have a specific focus on higher education, nor is it related to China, and Chinese scholarly works discussed in the following section do not refer back to the U.S. originated concepts, scholars still have to keep the two schools of thought in mind when studying the preferential policies in education in China, especially when making policy recommendations. In fact, China's policies to encourage ethnic minorities to receive all levels of education seem to be a combination of input and output focuses. The government wants to ensure minorities' right to receive education, and hope that ethnic minorities can achieve equal attainment as Han students at the same time.

Education and Ethnic Minorities in China

The General Picture

Access to schooling has never been more widespread in China. When compared to other developing countries, China's pace in making education available to its huge population has been astonishingly fast. The irony is that while the socialist market economy has increased the educational choices available, it has also made these choices more a function of poverty, gender, and ethnicity compared to the pre-reform, planned economy period. Educational inequalities continue to widen (Postiglione 2006). Although economic development and policies aiming to promote minority education have increased access to formal schooling since 1949, the educational attainment of ethnic minorities still remains behind the Han majority.

Minority groups in China are diverse with regard to cultural practices and historical experience with the larger Han society (Mackerras 1994, 1995; Gladney 1996; Harrell 1995). Studies have suggested that ethnic groups develop unfavorable attitudes toward education if they perceive that the school system is incompatible with aspects of their own cultures, or if they do not observe tangible returns to education among members of their own communities (Hansen 1999; Harrell and Mgebbu 1999). According to Hansen (2013), one big problem of minority school education is that it is entirely based upon Chinese language and history, allowing no room for the transmission for cultural values of ethnic minorities and denying the significance of the minorities' own languages, histories, religions, and cultural values. There is a striking contradiction where the government preaches the constitutional equality of nationalities (minzu 民族), while impressing on minority students immense feelings of cultural inferiority. The Chinese government educators and many Chinese intellectuals praise education as a means of civilizing the "backward", which contradicts the outspoken message of national equality. This is one of the reasons the Chinese government fails to popularize Chinese education effectively to some minority groups. On the contrary, in other regions where establishment of Confucian

education was early and the history of Han influence was long (for example, Naxi in Lijiang, Yunnan), the popularization effort is very successful. Nevertheless, being Sinicized by education, minority students' level of understanding of their own ethnic culture is worrisome (Sun 2012). Consistent with the theory presented before, another important reason some minorities choose not to receive education is that they fail to see significant economic or social advantage in spending money on school education. It certainly does not help that most of the estimated return to education in China is considerably lower than the world average (Han 2014).

Higher Education and Preferential Policies

Most Chinese scholars recognize the necessity and benefits of preferential policies towards ethnic minorities (Jin and Wang 2007; Long 2010; Sun 2012; Tang 2003; Teng and Ma 2009; Wang 2007; Wang 2009). They argue that the policies function as an effective guarantee of more equal access to education right, opportunities, and resources for ethnic minority students whose educational performance is comparatively poor. At the same time, scholars recognize that the unequal opportunity for ethnic minorities is due to economic reasons and the lack of educational resources in some regions. Thus preferential admission is a reasonable remedial policy to address the inequality. Hannum (2002) also confirmed the role of poverty and geography in contributing to educational disparities by ethnicity. Wang (2009) states clearly the policy's positive impacts, which include increasing cultural and linguistic diversity at universities at a minimal financial cost; significantly broadening minorities' access to college education with little social cost; having great symbolic significance for ethnic equality, and the cohesion of the Chinese nation.

However, some scholars criticize this policy. Wang (2010) lists a series of problems the current preferential policies cause: (1) minority students have less learning enthusiasm and

confidence; (2) policies create waste in education and human capital; (3) companies and organizations have bias against minority graduates; (4) admission process is less fair due to opportunistic tendency. For example, there were numerous scandals that applicants falsely reported or deliberately changed their ethnic identities in order to obtain the bonus points (Wang 2009; Sun 2012). Ma (2009) adds that the adjustment of admission standards is the primary factor responsible for the decline of educational quality in both secondary schools and universities.

Other researchers are concerned with the concept of fairness or equality. Yan and Li (2012) explain the problem in terms of "reverse discrimination". They point out that under the current "separate-provincial admission" (fenshenluqu 分省录取) model, the preferential policies might hurt Han students' opportunity to get into college. The current circumstance is that within one province, the access to education resources is fairly equal for different ethnic groups, while most inequalities occur among different provinces. Under the separate-provincial admission model, the real competition for admissions is within province. Han students in provinces with big minority populations, without preferential admissions, are disadvantaged compared to their minority classmates because those provinces generally do not provide good educational resources due to economic constraints.

Also, in regard to equality, Zhou (2009) states that China's approach to national equality borrowed from the Soviet Union causes two major problems. The approach emphasizes equality of groups while it ignores differences between groups. For example, different groups' proportional representation in universities is not considered. Other studies also mention that some ethnic groups like Mongol, Manchu, and Hui have exceeded the average level of educational attainment of the country (Sun 2012). Second, the approach focuses on equality

among groups while it ignores inequality within a group. For instance, larger quotas go to urban minority residents than rural minority residents. In short, the Chinese concept of "minority education" tends to regard all nationalities as one relatively homogenous group of people in need of more or less uniform special considerations within education (Hansen 2013).

Despite the controversy, studies offer very similar policy recommendations. Many researchers recognize that economic reasons and the lack of educational resources cause unequal educational opportunities for ethnic minorities (Long 2010; Tang 2003; Wang 2007; Xiao and Liu 2014). They recommend that the government lower the tuition and provide special financial aid to help minority college students (Jin and Wang 2007; Long 2010; Tang 2003). In the long run, the government should level the access to basic education, making minority applicants more competitive in "gaokao", which will lead to more equal access to higher education (Wang 2010; Yan and Li 2012). These considerations show that China's ideal of equality of educational opportunity is in accordance with Jefferson's concept of input, which according to Nwabuogu (1984), is the most traditional, more easily-achievable measure of equal educational opportunity. Other studies suggest that the government should improve the preferential policies by taking into consideration the differences in region, socio-economic status, access to basic education etc. (Teng and Ma 2009; Sun 2012).

From the articles discussed above, one can notice that most scholars examine the preferential policies on the national level, ignoring the fact that preferential policies vary widely among provinces. My research focuses on comparing different provinces and explaining why they have different preferential policies in terms of bonus points for ethnic minorities in the NCEE. I contend that the distinct demographics of ethnic minorities in each province's

jurisdiction influence provincial governments' preferential policy making. In the next section, I will explain my theory and hypotheses in a more detailed fashion.

Theory and Hypotheses

Why do preferential policies towards ethnic minorities differ across provinces in Chinese college admissions? Under the provincial enrollment model, the real competition in admissions is within each province (Yan and Li 2012). One might think that this makes comparisons between provinces meaningless because they do not compete with each other. However, this is exactly the reason why it is important to explain the difference in policies. Although all provincial governments build on the central government's foundational policy, each government acts solely on specific preferential policy making. I theorize that the distinct demographics of ethnic minorities in each province's jurisdiction affect the preferential policies made by provincial governments. Specifically, I propose the following four hypotheses:

1) Greater percentage of bonus points out of the total points are given to ethnic minority students when a province has a bigger percentage of minority population;
2) Greater percentage of bonus points out of the total points are given to ethnic minority students when, within that province, the student enrollment rates in regular secondary schools of autonomous counties are significantly lower than other regular counties;
3) Greater percentage of bonus points out of the total points are given to ethnic minority students when, within that province, the GDP per capita of autonomous counties are significantly lower than other regular counties;

4) A province has more types of bonus points for ethnic minority students when a province has bigger percentage of minority population.

The first three hypotheses share the same dependent variable: the percentage of bonus points out of the total points given to ethnic minority student. Hypothesis 1 is based on the assumption that when a group constitutes a bigger percentage of the population, the government needs to consider minority interest more in policy making to prevent turbulence. Keeping the stability of the society (weiwen, 维稳) is one of the Chinese government's top priorities. This is also true for provincial governments, especially for provinces that have higher percentages of ethnic minority populations. For example, in Xizang (Tibet) and Xinjiang Autonomous Regions, there has been a series of violent disturbances due to the tension between Tibetans/Uyghurs and the government. In those provinces, the government's preeminent goal is to pacify the unrest. Offering more bonus points in the NCEE and letting more minority students receive mainstream higher education is one response to lessen intergroup conflict. Although Tibet and Xinjiang may be the most extreme examples, there is no doubt that the bonus points serve as a "carrot" to bring more minorities to the government's side. Plus, many students go back to their hometown to serve as government officials, which is even more effective for the overall objective of a stable society.

Hypotheses 2 and 3 look into the difference between autonomous counties and regular counties in provinces. Note that autonomous counties, although not exclusively populated by ethnic minority citizens, have much higher percentages of ethnic minority citizens than regular counties. Both hypotheses are establishing the fact that ethnic minorities are disadvantaged compared to Han. Specifically, hypothesis 2 focuses on whether minorities are disadvantaged in education by comparing the student enrollment rates in autonomous counties and regular

counties. Hypothesis 3 concentrates on whether minorities are disadvantaged economically in general by comparing the GDP per capita in both types of counties. Note that educational disadvantage and economic disadvantage assessed in these two hypotheses are probably inter-related since education and economic well-being are always intertwined, both promoting the other. I hypothesize that when ethnic minorities are more disadvantaged educationally and economically, provincial governments will make strong preferential policy and will award more bonus points. This aligns with the central government's considerations to have these remedial policies in the first place, where ethnic minorities need special treatment due to their disadvantaged background.

Hypothesis 4 has a different dependent variable from the other hypotheses but shares the independent variables with hypothesis 1. I assume that when a province has a bigger percentage of ethnic minorities, the ethnic population in that population is likely to be more diverse. The diversity here can entail a wide range of criteria: how many different ethnic minority groups reside within the province? Is the habitation pattern of ethnic minorities scattered or concentrated? How many ethnic minorities live in urban areas and in rural areas? What is the language of administration during the NCEE, Mandarin or traditional ethnic languages? When the ethnic population is more diverse, the provincial governments inevitably need to make more detailed policies to address this diversity. Thus there will be more types or levels of bonus points awarded to ethnic minorities in those provinces. This can refer to different numbers of bonus points for students living in areas where minorities are highly concentrated (such as autonomous townships), versus living sporadically in other rural or even urban areas. For Jilin and Heilongjiang province, this refers to different numbers of bonus points that are given to students

who use Mandarin or traditional ethnic language during NCEE. There is a variety of criteria for provinces in terms of offering different types or levels of bonus points.

One might raise a question about the directionality of the relationship: could the more generous preferential policies attract more ethnic minorities to move to that province? This is highly unlikely due to the household registration system (hukou zhidu 户口制度) in China. As a result of hukou being registered with a specific local police station, changing hukou is usually a difficult task involving onerous paperwork. This restricts one's freedom to migrate across provinces, or even within province between rural and urban areas. Many are deterred by the complicated process. In addition, a student's eligibility to take NCEE in a province is related to hukou. If hukou record shows that the student recently migrated to the place where he or she plans to take NCEE, the student risks the possibility of not being granted the permission to take the exam. Thus, it is reasonable to assume that it is the ethnic minority population that influences the provincial preferential policy making.

The four hypotheses all address the specific demographic features of the ethnic minorities within a province, which leads to my overarching thesis statement that distinct demographics of ethnic minorities in each province's jurisdiction affect a provincial government's preferential policy making.

Research Design

Definition and Measurement

In this study, provinces I am referring to are the 31 provinces (or autonomous regions) in mainland China, thus excluding Hong Kong, Macau, and Taiwan due to their distinct college admission systems. The dependent variable for the first three hypotheses is what percentage of

bonus points out of total points is given to ethnic minority students in each province. Although the NCEE's total number of points is 750 for most provinces, several provinces use different total points. As a result, the dependent variable is defined in percentage scale. When examining these three hypotheses, I take into account only the highest possible bonus points an ethnic minority student can get in a province. In other words, different levels of bonus points within a province's policy are omitted. This simplifies the process while not hindering the relevance and accuracy of the study. At the same time, it makes sense to examine the upper limit of bonus points given because it shows exactly how far the provincial governments can be pushed in policy making considering the demographics of ethnic minorities in their jurisdictions. The percentages are calculated according the list of provinces' preferential policies in 2014 compiled by the widely-known college application expert in China who goes by the pseudonym Chenwu.

The dependent variable for the fourth hypothesis is how many different types or levels of bonus points a province's preferential policy has. "Type" refers to any specification in the preferential policy that addresses part of the ethnic minority applicants. For example, this can be multiple clauses that address the bonus points offered to different ethnic minority groups, or clauses that separate the policy towards students who take the NCEE in Mandarin from student who take it in their traditional ethnic language etc. "Level" refers to the different amount of bonus points given. However, if a province offers two types of bonus points in the preferential policy but they are the same level, both are ten points for example, the province would still be assigned the value of two in this scale. In addition, if a section of the policy states that "when a Han student and an ethnic minority student have the same score, the latter is preferred in admission" without designating points-added, I count this as 0.5 in this scale. Note that this scale does not include the specific policies towards Han living in minority concentrated areas.

The independent variable for hypotheses 1 and 4 is percentage of minority population of a province. These data will come directly from the 2000 Census Data of National Bureau of Statistics of China. For hypotheses 2 and 3, the independent variable is the calculated difference in percentage (Δ%), examining how much lower the enrollment rates in regular secondary schools and the GDP per capita in autonomous counties are than in regular counties. I chose to calculate percentages instead of using numerical differences because the former more accurately demonstrates the extent of the disparity. For instance, two provinces may have the same numerical difference of 1,000 dollars in GDP per capita between two county types, but the baseline GDP per capita, GDP per capita of regular counties, may be 10,000 dollars apart, making the numerical difference measurement imprecise in judging the disparities.

I will demonstrate the calculation involved in hypotheses 2 and 3 using Liaoning province as an example. Liaoning has 36 regular counties and eight autonomous counties. For hypothesis 2, I calculate the weighted averages of student enrollment rates in regular secondary schools in these two county types. The weighted average for regular counties is 3.07 students per 10,000 people, while the weighted average for autonomous counties is 2.21 students per 10,000 people. I subtract the latter from the former, and the result indicates that for every 10,000 people, the autonomous counties have 0.86 fewer students enrolled in regular secondary schools than regular counties. This numerical difference is then divided by the weighted average of regular counties (3.07 per 10,000 people) in order to give us the difference in percentage. Thus, the autonomous counties' enrollment rate of regular secondary schools in Liaoning province is 28.15% lower than regular counties' rate. The 28.15% is the value of the independent variable for hypothesis 2. Note that a negative percentage means that autonomous counties' enrollment rate is actually higher than regular counties.

Similarly, I calculate the GDP per capita of both regular counties and autonomous counties. For Liaoning province, the regular counties have a GDP per capita of 6,716.67 dollars, while the autonomous counties have a GDP per capita of 4,877.79 dollars. After subtraction, the result shows that the autonomous counties' GDP per capita is 1,838.88 dollars lower than regular counties'. This amount is then divided by 6,717.67 dollars, the regular counties' GDP per capita. Therefore, the GDP per capita in Liaoning's autonomous counties is 27.38% lower than in its regular counties. The 27.38% is the value of the independent variable for hypothesis 3. A negative province percentage indicates that autonomous counties have a higher GDP per capita compared to regular counties in that province.

The county level data of population, enrollment, and GDP needed to do the test are provided by the China Data Center at the University of Michigan. To maintain the time consistency of independent variables, I use the county level data in the year of 2000 as well. Note that for hypotheses 2 and 3, data of the autonomous regions and provinces that do not have autonomous counties are excluded because no comparison can be made. I expect most of the calculated differences in percentage are positive since ethnic minorities are generally less educationally and economically advantaged. This does not mean that a negative value is impossible to appear for several specific ethnic groups are actually do equally well or even better than Han in terms of family wealth and education attainment.

For each hypothesis, I will create a graph to show the relationship between the independent variable and the dependent variable. If my hypotheses are reasonable, the graphs should all show positive correlations.

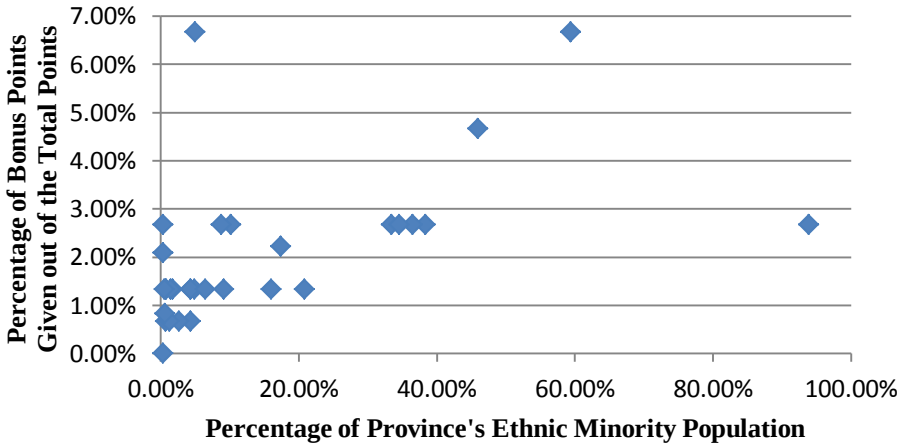
Limitations

One important limitation of this study is time consistency of the data sources of different variables. The dependent variables, percentage of bonus points out of the total points and types or levels of bonus points, are generated according to policies in 2014, while all the independent variables are in the year of 2000 due to the difficulty of finding comprehensive 2010 Census data. However, the preferential policies towards ethnic minorities remain quite stable over the years, unlike preferential policies towards awards recipients of academic competitions or certified national standard athletes, due to central government's firm stand on the importance of these remedial policies. Therefore, this study can still provide some insights on why provinces have different preferential policies towards ethnic minorities in college admissions.

Another thing that needs to be considered is that this is a specific case study of the Chinese college admissions system. The results of this study are not likely to be generalizable to other populations or countries due to China's uniqueness as a country, a state, and a nation.

Discussion of Results and Analysis

Graph 1. Percentage of Bonus Points out of Total by Percentage of Ethnic Minority Population
(N=31 Provinces)

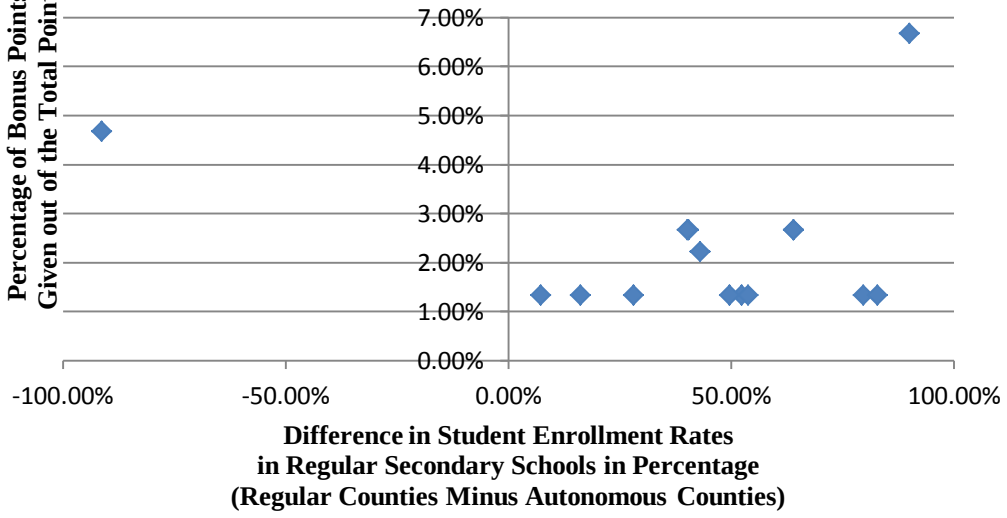


Source: Chenwu (2014), China Data Center (2000)

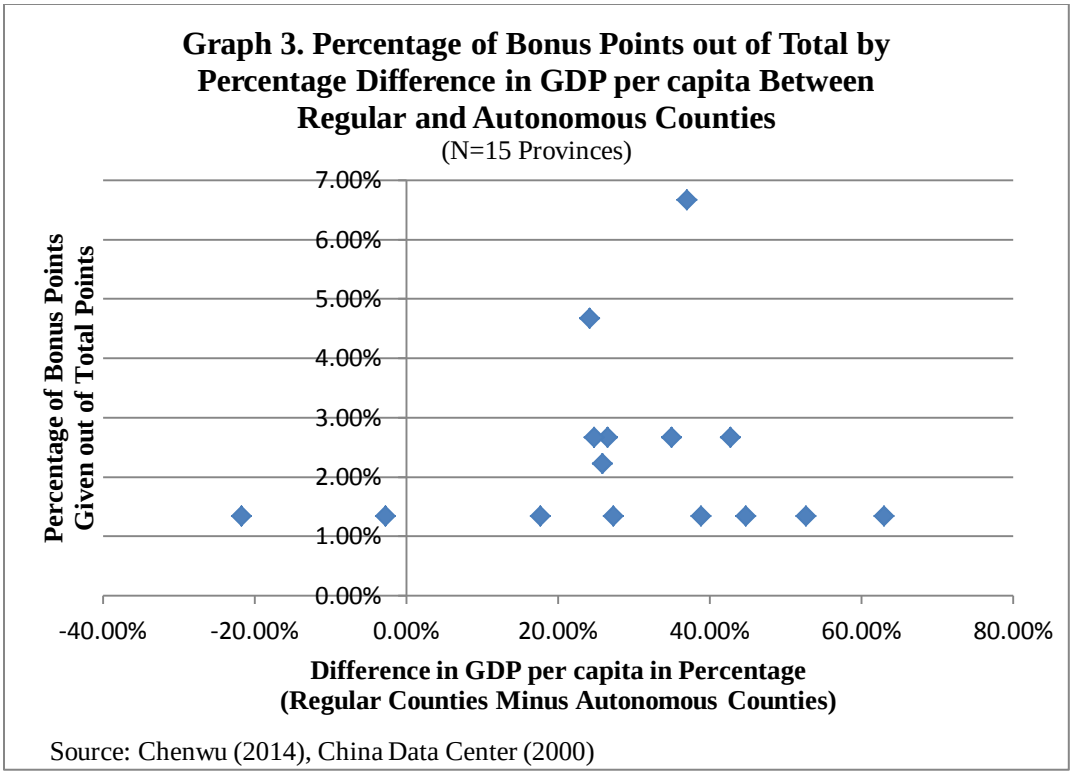
Graph 1. illustrates the relationship between the percentage of ethnic minorities in a provinces' populations and the percentage of bonus points out of the total points that are given to ethnic minority students. Taking most of the points on the graph into account, a positive correlation between the variables can be observed. If ethnic minorities constitute a higher percentage of a province's population, then that province is more likely to offer more generous bonus points to ethnic minority students in NCEE. Although most of the data points are clustered in the lower left corner (x-axis 0%-40%; y-axis 0%-3%), and many points are close to the y-axis, the graph shows that as the percentage of ethnic minority population increases, the spread of the percentage of bonus points awarded shrinks and the data points are more close to the upper bound of this corner. There are two noticeable outliers on the graph – Sichuan province at the upper left corner, and Xiziang (Tibet) Autonomous Region at the lower right corner. I will analyze the possible reasons for them to be drastically different from the rest of the provinces. Overall, the graph aligns with hypothesis 1.

Graph 2. Percentange of Bonus Points out of Total by Percentage Difference in Student Enrollment Between Regular and Autonomous Counties

(N=15 Provinces)



Source: Chenwu (2014), China Data Center (2000)

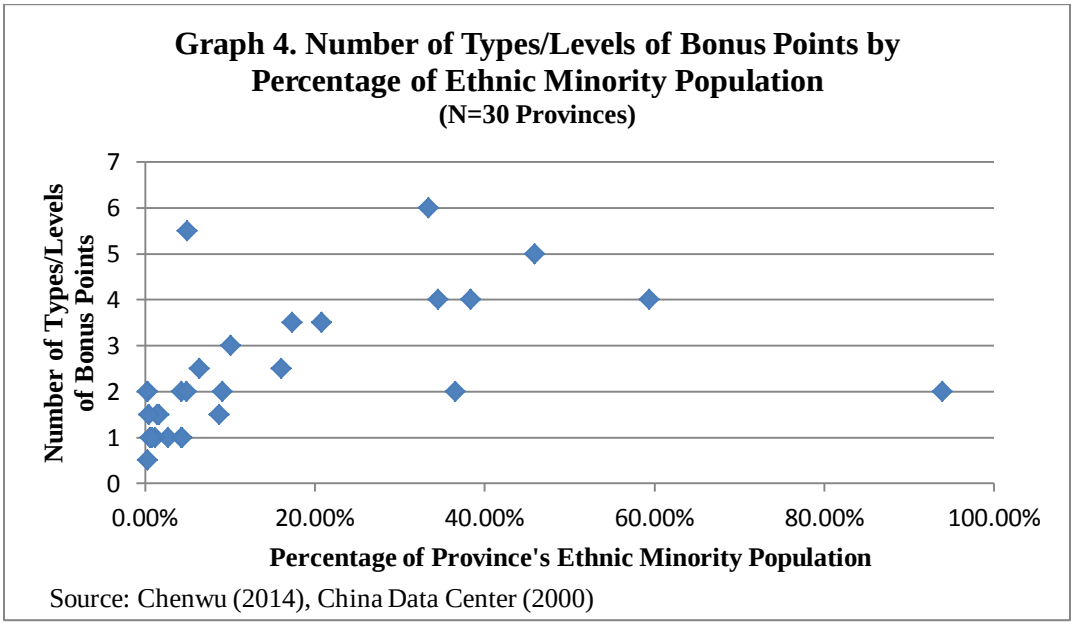


For hypotheses 2 and 3, I mentioned in the research design section that I would exclude all the autonomous regions and provinces that do not have autonomous counties. In the end, only fifteen provinces are included in these two analyses. Because most of the bonus points are numbers like 5, 10, 20 and most of the provinces have 750 total points in NCEE, the levels of percentage of bonus points are limited for these fifteen provinces. In fact, eight out of the fifteen provinces, more than half, award 1.33% bonus points in the exam. There are only five different percentages of bonus points in total for these provinces. Thus, it is very hard to draw reliable conclusions from the graphs. The graphs do meet my expectation that most of the data points are in the positive side of the x-axis. This means that in general, average student enrollment rates in regular secondary schools is higher in regular counties than in autonomous counties. Similarly, average GDP per capita is higher in regular counties than in autonomous counties. However, when paying attention to the right side of the graphs, it is hard to discern any pattern. Sichuan province still stands out in the graphs due its incredibly generous preferential policy.

On the negative side of the x-axis, Qinghai province is the outlier in Graph 2. Out of the seven autonomous counties in Qinghai, five of them are designated Hui and Tu autonomous counties. Sun (2012) mentions Hui as one of the ethnic minorities that has better education attainment then the nation's average. Thus, part of the reason why Qinghai has a negative value may be that Hui and Tu students have better access to secondary education than regular counties or their families are more willing to send them to schools. Since Qinghai province has a very high percentage of ethnic minority population (45.97%), the bar is set relatively low compared to a province that has more than 90% of Han population with a very high enrollment rate. The data proves this point because Qinghai actually has the lowest regular county enrollment rate among the fifteen provinces. The average regular county enrollment for all provinces included is 3.43 for every 10,000 people, whereas Qinghai's enrollment is 0.89 for every 10,000 people. For the autonomous counties, Qinghai's enrollment (1.71 per 10,000 people) is only slightly above the average of all provinces (1.67 per 10,000 people).

In Graph 3, the negative outliers are Jilin and Hubei province. Hubei is really close to the borderline where the calculated difference in GPD per capital in percentage is only -2.70%, whereas Jilin is a much more extreme case because its difference in percentage is -21.70%. Neither province has a big ethnic minority population (Jilin 9.15%, Hubei 4.36%). Both autonomous counties in Hubei province are designated as Tujia Autonomous County, which means Tujua people are slightly better off economically than the general population in Hubei. For Jilin, the three autonomous counties are Manchu, Mongol, and Korean. The first two minorities are mentioned by Sun (2012) as exceeding the national average higher education attainment, and Koreans have the anecdotal reputation of being well-educated, too. Considering

the widely recognized reciprocal relationship between education and financial success, it is not surprising that the value for Jinlin is negative.



Graph 4 presents a strong positive relationship between percentage of province's ethnic minority population and the number of types/levels of bonus points a province offers. If ethnic minorities constitute a higher percentage of a province's population, that province is more likely to create more detailed preferential policies that awarded several different bonus points amounts, distinguishing students who are from different minority groups, different cities/townships/counties, rural/urban areas, or who use mandarin/traditional ethnic language in NCEE etc. Provinces employ various criteria to subdivide their ethnic minority applicants. Unlike graph 1, one can spot a clear trend even in the lower left corner in graph 4. Overall, the graph demonstrates consistency with my hypothesis 4. However, this graph has the same outliers as graph 1, with Sichuan province in the upper left corner, and Xizang (Tibet) Autonomous Region in the lower right corner.

It is very interesting that two graphs present the same outliers – Sichuan and Tibet. Again, hypothesis 1 and 4 share independent variables – percentage of province's ethnic minority

population, while having different dependent variables – percentage of bonus points granted and number of types/levels of bonus points granted. Demographically, Tibet has the highest ethnic minority population percentage 93.93%, most of them Tibetan, leading the second place Xinjiang Uyghur Autonomous Region by more than 30%. It shares very little with the other Chinese provinces regarding culture. The Tibetan culture heavily relies on Buddhism. However, unlike the rest of China which is mainly influenced by Han-Chinese Buddhism; Tibet is dominated by the Tibetan Buddhism division. Religion is a much more important part in life for Tibetans than for average Chinese. Not surprisingly, the most respected people there are monks. As previously mentioned in the literature review section, some scholars contend that ethnic groups develop unfavorable attitudes toward education if they perceive that the school system is incompatible with aspects of their own cultures (Hansen 1999; Harrell and Mgebbu 1999). Hansen (2013) points out the problem precisely: even in areas where minorities are heavily concentrated, school education is still entirely based upon Chinese history and mainstream values, allowing very little if any room for distinct languages, histories, religions, and cultural values of ethnic minorities. Therefore, regular education is not a very appealing choice. Tibetan families are more likely to be willing to send their sons to monasteries than to let them go to regular secondary schools. In 2000, when compared to other provinces, Tibet had the lowest regular secondary school enrollment (5.52 per 10,000 people), the fewest secondary schools and higher education institutions in China (0.55 and 0.66 for 10,000 people respectively). All these indicate that not many Tibetan students actually take the NCEE to pursue further education, making little sense for the provincial government to develop generous or detailed preferential policies.

Sichuan province, the other outlier, has a relatively low ethnic minority population (5%), but offers ethnic minority students very high numbers of bonus points, and has a very detailed preferential policy. Sichuan is unique because despite its small minority population, there are three autonomous prefectures and four autonomous counties within the jurisdiction of the province. It has more ethnic administrative units than any other province that has a similar percentage of ethnic minority population. The three autonomous prefectures (Garzê Tibetan Autonomous Prefecture, Liangshan Yi Autonomous Prefecture, Ngawa Tibetan and Qiang Autonomous Prefecture) cover more than 60% of the land in Sichuan. Thus, the ethnic minority population in the autonomous administrative units is more spread out than usual. The geographical distribution may result in additional difficulty in providing access to education for ethnic minority students. This may be the reason why Sichuan provincial government decided to offer very generous bonus points to ethnic minority applicants.

For hypothesis 4, Sichuan's preferential policy is more detailed because it has separate clauses for ethnic minority students in different geographical areas, and for each clause, it offers different levels of bonus points for students who are applying to first-tier universities (yiben yuanxiao/benyipi yuanxiao 一本院校/本一批院校) and non-first-tier universities (Chenwu, 2014). The wide geographic spread of the ethnic minority population can explain why Sichuan provincial government wants to establish clear standards on students in which areas get bonus points. Interestingly, Sichuan is the only province that differentiates the level of bonus points based on whether or not the student is applying to first-tier universities. Specifically, first-tier university applicants receive lower bonus points than other applicants. However, admission to first-tier universities is the most competitive in terms of the NCEE score required. This practice

could be Sichuan provincial government's effort to offer preferential treatment to ethnic minority applicants but still maintain some fairness in the most competitive part of the admission.

Conclusion

This paper explores the relationship between demographic characteristics of ethnic minorities in provinces and the preferential policies towards ethnic minority students in Chinese college admission system, in the form of bonus points awarded in the NCEE. The results suggest that when a province has bigger percentage of minority population, it is likely to offer greater percentage of bonus points out of the total points. It also tends to have a more detailed policy that includes more types and levels of bonus points. Nevertheless, Sichuan and Tibet are the two outliers in these analyses. The potential reasoning for Tibet being an outlier is that the cultural incompatibility makes regular education a less attractive path, which means very few Tibetan students take NCEE to pursue higher education. Detailed and generous preferential policies might be useless, so the government did not create them. The wide geographical spread of ethnic minority population may be the reason that Sichuan is an outlier. The generous policy may be an indication that the provincial government wants to compensate for the difficulty of providing access to education for ethnic minority students added by their geographical spread. The provincial government's effort to maintain some fairness in the admission of the most competitive universities in addition to the geographical distribution of ethnic minority population could result in the very detailed policy Sichuan has. The other two hypotheses may not be reasonable based on the graphs generated. How much the student enrollment rates in regular secondary schools and the GDP per capita in regular counties are higher than autonomous counties does not seem to affect provincial government's preferential policy making. Given that

the Chinese government's firm stance on having remedial policies towards ethnic minority students is unlikely to change in the near future, these preferential policies will remain for a while, but not necessarily without any small adjustment. Therefore, it is crucial to understand what may affect provinces' preferential policy making. Future studies can explore the impact of other provincial characteristics on preferential policy making. This paper only focuses on one specific aspect of preferential policies – bonus points. Other forms of preferential policies towards ethnic minorities mentioned in the introduction section also need to be examined closely. Due to the lack of scholarly works on this topic that are support by data, there is a lot of room for researchers to narrow the gap between tentative theories and actual circumstances.

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Appendix

Map1. Map of China

Source: Nations Online Project (2015)

Table 1. Provinces' Data on Minority Population,
Bonus Points Percentage and Bonus Points Type/Level
(N=31 Provinces)

Province	Ethnic Minority Population	Bonus Points Percentage out of Total Points	Bonus Points Type/Level Count
Shanxi	0.32%	0.00%	0.5
Beijing	4.31%	0.67%	1
Tianjin	2.71%	0.67%	1
Anhui	0.67%	0.67%	1
Henan	1.25%	0.67%	1
Shanghai	0.63%	0.83%	1
Hebei	4.35%	1.33%	2
Inner Mongolia	20.83%	1.33%	3.5
Liaoning	16.06%	1.33%	2.5
Jilin	9.15%	1.33%	2
Heilongjiang	4.89%	1.33%	2
Zhejiang	0.85%	1.33%	1
Fujian	1.71%	1.33%	1.5
Shandong	0.70%	1.33%	1
Hubei	4.36%	1.33%	1
Guangdong	1.49%	1.33%	1.5
Chongqing	6.47%	1.33%	2.5
Xizang(Tibet)	93.93%	2.67%	2
Shaanxi	0.50%	1.33%	1.5
Jiangsu	0.35%	2.08%	2
Hainan	17.38%	2.22%	3.5
Jiangxi	0.31%	2.67%	2
Hunan	10.13%	2.67%	3
Guangxi	38.37%	2.67%	4
Guizhou	36.56%	2.67%	2
Yunnan	33.41%	2.67%	6
Gansu	8.75%	2.67%	1.5
Qinghai	45.97%	4.67%	5
Ningxia	34.56%	2.67%	4
Sichuan	5.00%	6.67%	5.5
Xinjiang	59.42%	6.67%	4

Source: Chenwu (2014), China Data Center (2000)

Table 2. Provinces' Data on Bonus Points Percentage and Student Enrollment in Regular Secondary Schools of Regular and Autonomous Counties (N=15 Provinces)

Province	Bonus Points Percentage out of Total Points	Number of Counties		Student Enrollment in Regular Secondary Schools (out of 10,000 people)			
		Regular Counties	Autonomous Counties	Regular Counties	Autonomous Counties	Numerical Difference(△)	Difference in Percentage (△%)
Hebei	1.33%	132	6	3.520542	3.261609	0.258934	7.35%
Liaoning	1.33%	36	8	3.073269	2.208274	0.864995	28.15%
Jilin	1.33%	38	3	3.312769	2.773078	0.539691	16.29%
Heilongjiang	1.33%	65	1	3.178031	1.510000	1.668031	52.49%
Zhejiang	1.33%	61	1	4.026878	0.820000	3.206878	79.64%
Hubei	1.33%	63	2	4.731167	2.379582	2.351584	49.70%
Hunan	2.67%	81	7	4.761865	1.709365	3.052499	64.10%
Guangdong	1.33%	74	3	5.80429	0.998078	4.806212	82.80%
Hainan	2.22%	10	6	3.050794	1.736171	1.314623	43.09%
Chongqing	1.33%	22	4	4.86783	2.245269	2.622561	53.88%
Sichuan	6.67%	137	3	3.868035	0.385054	3.482981	90.05%
Guizhou	2.67%	65	11	2.469349	1.468862	1.000487	40.52%
Yunnan	2.67%	91	29	2.071385	1.237729	0.833656	40.25%
Gansu	2.67%	69	7	1.79589	0.645683	1.150207	64.05%
Qinghai	4.67%	32	7	0.893931	1.709197	-0.81527	-91.20%
			Average:	3.428402	1.67253	1.755871	41.41%

Source: Chenwu(2014), China Data Center (2000)

Table 3. Provinces' Data on Bonus Points Percentage and GDP per capita of Regular and Autonomous Counties (N=15 Provinces)

Province	Bonus Points Percentage out of Total Points	Number of Counties		GDP per capita (dollars)			
		Regular Counties	Autonomous Counties	Regular Counties	Autonomous Counties	Numerical Difference(△)	Difference in Percentage (△%)
Hebei	1.33%	132	6	6944.73	4242.17	2702.56	38.92%
Liaoning	1.33%	36	8	6716.67	4877.79	1838.88	27.38%
Jilin	1.33%	38	3	5361.23	6524.72	-1163.49	-21.70%
Heilongjiang	1.33%	65	1	4827.84	3970.71	857.13	17.75%
Zhejiang	1.33%	61	1	12500.51	4615.38	7885.12	63.08%
Hubei	1.33%	63	2	5167.34	5306.78	-139.44	-2.70%
Hunan	2.67%	81	7	4286.73	3145.18	1141.54	26.63%
Guangdong	1.33%	74	3	7720.34	3645.81	4074.52	52.78%
Hainan	2.22%	10	6	5684.52	4208.78	1475.74	25.96%
Chongqing	1.33%	22	4	3687.83	2036.17	1651.67	44.79%
Sichuan	6.67%	137	3	3893.51	2450.32	1443.19	37.07%
Guizhou	2.67%	65	11	2400.82	1559.84	840.98	35.03%
Yunnan	2.67%	91	29	3362.17	2527.51	834.66	24.83%
Gansu	2.67%	69	7	2458.29	1406.58	1051.72	42.78%
Qinghai	4.67%	32	7	3891.03	2947.37	943.66	24.25%
			Average:	5260.24	3564.34	1695.90	29.12%

Source: Chenwu(2014), China Data Center (2000)