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Abstract

This article investigates the temporal trend in the socioeconomic differentials between ethnic minorities and the Han majority in China. Using the data from a series of population censuses and a mini-census, it illustrates that, while the regional distribution of ethnic minorities remained relatively stable, occupational segregation and educational disparities between minorities and Han have increased over time from 1982 to 2005. Multivariate analyses of data from the 2005 mini-census further reveal that ethnic minorities were disadvantaged in earnings in urban labor markets compared to the Han, especially those minorities in the private sector and in self-employment. The analysis shows substantial heterogeneity among ethnic minorities in their socioeconomic relationship with Han and presents a comprehensive picture of how different ethnic minorities have fared in the course of China's economic transition.

INTRODUCTION

China is a multi-ethnic nation consisting of 56 groups—the Han 汉族 and 55 minorities.¹ Despite the fact that ethnic minorities account for less than 10 percent of the national population, they are scattered all over the vast territory, but mostly in the northwestern and southwestern regions, with each inhabiting certain areas. Historically, Chinese ethnic minorities have trailed the Han in terms of a variety of socioeconomic measures.² Since the early 1950s the new communist government has started to identify minorities and implemented various policies to protect their socioeconomic rights and to promote ethnic egalitarianism and national unity³.

To what extents have these efforts been successful in reducing socioeconomic disparities between ethnic minorities and the Han majority in China today? The literature on Chinese minorities tends to focus on the ethnographic analyses of specific minority groups pertaining to their social histories and identifications according to the predominant forms of sustenance organization, marriage norms and patterns, religious and cultural orientations, and linguistic practices.⁴ These studies, in general, adopted an array of concepts and methodologies, rendering the findings for different groups not directly comparable. Quantitative analyses are especially limited because of the unavailability of data on small minority groups of heterogeneous composition, who inhabit the remote regions of western China. National survey data with a limited sample size cannot support a comprehensive comparison between a specific ethnic minority and the Han group.⁵ While nationwide population census data may provide a large enough sample for such analyses, they often lack information on labor market outcomes⁶. Hence, with a few exceptions,⁷ the booming literature on Chinese social stratification has paid scant attention to ethnic minorities in the course of the rapid social and economic changes over the past decades.

¹ These groups are not distinguished from one another solely on the basis of physical and anthropometric features, thus are not referred to as “races”. They are literally called “nationalities” or *minzu* 民族 in Chinese. To be identified as a nationality, the group has to meet four criteria, articulated by Joseph Stalin: common language, common territory, common economic life, and common culture (Eberhard 1982; Fei 1981). In this article, we use the terms “ethnic group” and “nationality” inter-changeably in the context of China.

² Poston and Shu 1987.

³ Mackerras 1994

⁴ See Bovingdon (2010) for Uyghur; Bulag (2002) for Mongols; Harrell (2001) for Miao; Kaup (2001) for Zhuang.

⁵ Bhalla and Qiu 2006; Gustafsson and Li 2003; Hasmath 2008; Hasmath, Ho and Liu 2012; Zang 2012.

⁶ Maurer-Fazio, Hughes and Zhang 2009.

⁷ Post and Shu 1987; Hannum and Xie 1998; Wu and Song 2014; Zang 2010.

In this paper, we aim to provide a comprehensive overview of ethnic social stratification in China's economic transition. Based on the analyses of data from a series of Chinese population censuses from 1982 to 2000 and the mini-census in 2005, we document the trends in geographic distribution, and educational and occupational attainment of 18 minority groups whose populations exceed 1 million and of the Han over time. We then focus on the empirical investigation of the labor market outcomes of ethnic minorities treated as a whole and as individual groups, by capitalizing on a large sample from the 2005 population mini-census with detailed information on labor market outcomes. Given the lack of available longitudinal data on earnings, we approximate the changes over time by the variations across employment sectors to assess how the market reform in China has affected ethnic inequality. Finally, we discuss the implications of these findings and suggest future directions for the study of ethnic relations in China.

THE FATE OF ETHNIC MINORITIES IN CHINA'S ECONOMIC REFORM AND REGIONAL DEVELOPMENT

According to China's 2010 population census, the 55 non-Han minorities had a combined population of 111,966,349, accounting for 8.4 percent of the national total.⁸ As shown in Table 1, the minority population had grown much faster than the Han population, largely because minorities of lower socioeconomic status tend to have higher fertility rates and the enforcement of the one-child policy is much more lenient toward them. As a matter of fact, the number of ethnic minority groups with populations exceeding 1 million had increased from 15 in 1982 to 18 in 2010, and they constituted more than 93 percent of the Chinese minority population.

Most minorities occupy their own compact territory and thus are spatially isolated from one another, except for a certain amount of interaction with the Han majority. Figure 1 plots the geographic distribution of 18 minorities with at least 10 percent of that minority in the prefectural population, largely corresponding to China's ethnic autonomous areas. According to the first Constitution in 1954, regional autonomy can be established in areas where an ethnic minority lives in a compact community. As of 2005, there were 5 autonomous regions, 30 autonomous prefectures and 120 autonomous counties/banners in China, covering 71 percent of ethnic minorities and 64

⁸ National Bureau of Statistics 2011.

percent of the territory.⁹ The head of government of each autonomous area must by law be a member of that area's specified ethnic group. The laws also allow limited autonomy in finance, economic planning, arts, science, and cultural policies, and in the organization of the local police. Starting from 1980, Hu Yaobang 胡耀邦—then General Secretary of the Chinese Communist Party—introduced a series of socioeconomic policies that favored minorities with respect to family planning, college admission, job recruitment and promotions, and representation in legislative and other government bodies.¹⁰

Table 1: Population Size of Major Ethnic Groups in China, 1982-2010

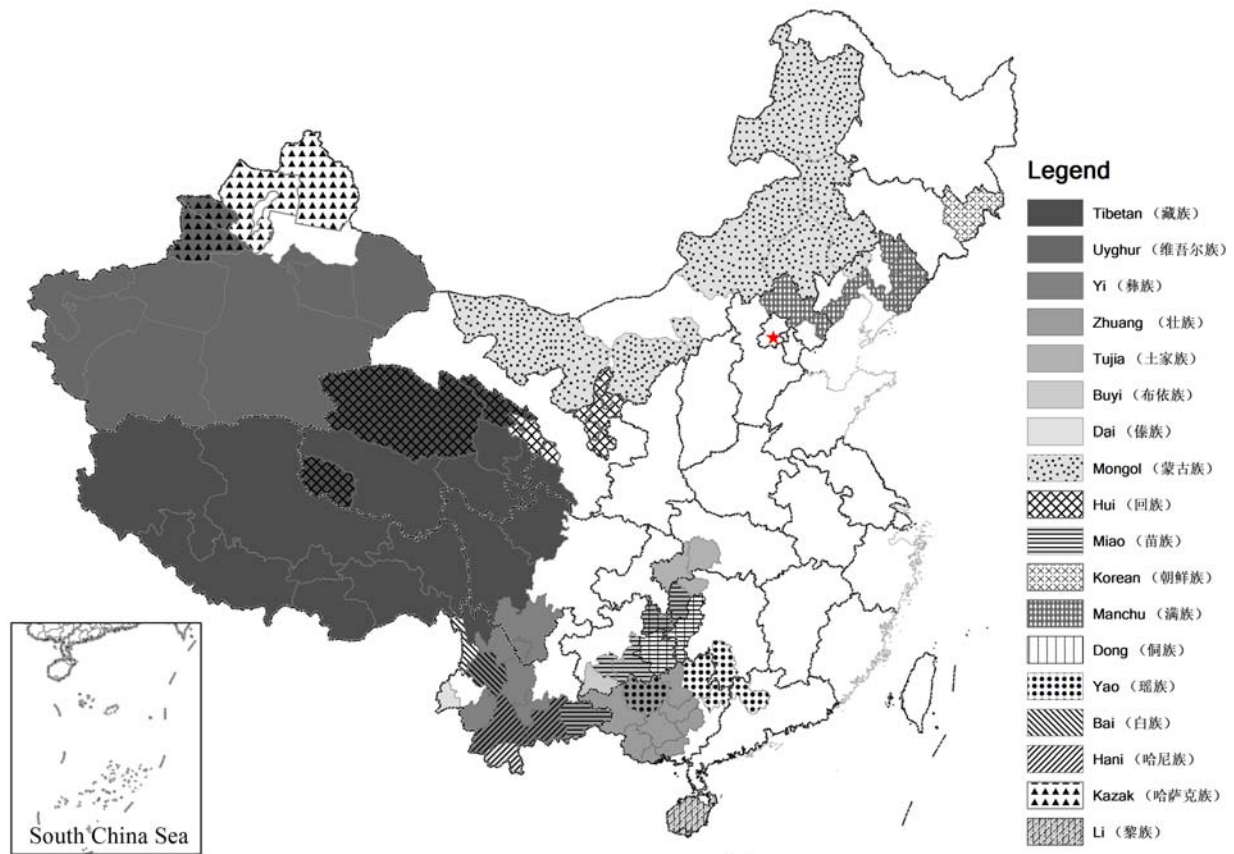
Census Code	Ethnic Group	1982	1990	2000	2010
	National total	1003913927	1130510638	1242612226	1332810869
	Minority	67238983	91323090	105226114	111966349
1	Han 汉族	936674944	1039187548	1137386112	1220844520
2	Mongol 蒙古族	3411367	4802407	5813947	5981840
3	Hui 回族	7228398	8612001	9816805	10586087
4	Tibetan 藏族	3847875	4593072	5416021	6282187
5	Uyghur 维吾尔族	5963491	7207024	8399393	10069346
6	Miao 苗族	5021175	7383622	8940116	9426007
7	Yi 彝族	5453564	6578524	7762272	8714393
8	Zhuang 壮族	13383086	15555820	16178811	16926381
9	Bouyi 布依族	2119345	2548294	2971460	2870034
10	Korean 朝鲜族	1765204	1923361	1923842	1830929
11	Manchu 满族	4304981	9846776	10682262	10387958
12	Dong 侗族	1426410	2508624	2960293	2879974
13	Yao 瑶族	1411967	2137033	2637421	2796003
14	Bai 白族	1132224	1598052	1858063	1933510
15	Tujia 土家族	2836814	5725049	8028133	8353912
16	Hani 哈尼族	1058806	1254800	1439673	1660932
17	Kazak 哈萨克族	907546	1110758	1250458	1462588
18	Dai 傣族	839496	1025402	1158989	1261311
19	Li 黎族	887107	1112498	1247814	1463064
	Subtotal	62998856	83385217	98485773	104886456
	% of all minority	93.7	91.3	93.6	93.7
	% Minority of Nation	6.7	8.1	8.5	8.4

Source: <http://www.stats.gov.cn/tjsj/pcsj/>

⁹ Information Office of the State Council 2005.

¹⁰ Mackerras 1994; Sautman 1998; Zang 2010.

Figure 1: Geographic Distribution of 18 Ethnic Minority Groups in China, 2005



* Prefectures with at least 10 percent of the minority in the territory (the threshold is set at 6 percent for Yao as Yao nationality is concentrated in several counties within the prefectures of Guangxi, Hunan and Guangdong dominated by the Han population).

Notwithstanding these efforts, minorities continued to lag behind the Han in socioeconomic attainment, a problem largely attributable to the geographic distribution of different ethnic groups and regional disparities in development, especially in the 1990s. Indeed, China's phenomenal economic growth has been accompanied by the uneven development of the rural and urban areas and of the coastal and inland regions.¹¹ The urban-rural ratio of income per capita increased dramatically from 2.5 in 1990 to 3.1 in 2000 and further to 3.2 in 2005, and 43 percent of the overall income inequality in China is attributed to the urban-rural income inequality.¹²

¹¹ Xie and Wu 2009; Li, Sato and Sicular 2010.

¹² Cai and Wan 2006, 3.

A similar trend can be observed across regions.¹³ The uneven regional economic development further differentiated local governments' capacity in funding education. In many poor and rural areas in the central and western regions, local governments have tough time raising sufficient revenue to cover teachers' salaries, not to mention other non-instructive costs.¹⁴ This has resulted in the substantial disparities in per-student educational expenditure across areas and regions.¹⁵ Furthermore, the uneven regional development has triggered a large-scale internal migration, especially from inland to coastal provinces, for better economic opportunities since the early 1990s.¹⁶ Even though institutional barriers and social exclusions associated with the *hukou* 户口 system continue to deny a sizable migrant population of local (urban) permanent residency, these migrants have achieved economic and social mobility compared to the farming life they have left behind in their home villages.¹⁷

The changing regional inequality and labor migration further complicated ethnic socioeconomic stratification in China. First, the growing regional and rural-urban disparities may have pushed ethnic minorities, who mainly reside in remote western rural areas, into even more disadvantaged positions relative the Han. Secondly, it is mostly the Han living in the ethnic areas who migrate to coastal areas for better economic opportunities, because minorities tend to encounter cultural and linguistic hurdles when they decide to migrate elsewhere. Furthermore, while government strategies designed to develop western regions have been intended to bring economic prosperity to minorities in those regions,¹⁸ the policies seem to have failed to deliver. Instead, the influx of Han migrants into the border regions and their subsequent direct competition with ethnic minorities have aggravated ethnic conflicts in regions such as Xinjiang 新疆 and Tibet 西藏.¹⁹

Last but not least, the implementation of preferential policies towards ethnic minorities in non-farm sectors has also encountered serious challenges in the context of China's further marketization and decentralization. The socialist redistributive hierarchy that used to effectively carry out

¹³ Fleisher, Li and Zhao 2010; Kanbur and Zhang 2009.

¹⁴ Tsang and Ding 2005.

¹⁵ Hannum 2002; Wu 2010.

¹⁶ Hao 2012.

¹⁷ Ou and Kondo 2013.

¹⁸ Lai 2002.

¹⁹ Howell and Fan 2011; Wu and Song 2014.

administrative fiat to promote ethnic equality had been undermined to a large extent as the economic reform proceeded.²⁰ The profit-driven private firms naturally placed more emphasis on economic efficiency than social justice; even state firms had been increasingly allowed to adopt market practices in recruiting, rewarding, and dismissing workers.²¹ Uncertain about a job candidate's skills and potential productivity, employers may base their hiring decision on visible features such as ethnicity or gender, resulting in labor market discrimination. Without appropriate regulations, discriminations against ethnic minorities may have become more rampant than before in urban China's labor markets.²²

Hence, the dramatic economic and social changes in China over the past decades may have pushed ethnic minorities into more disadvantaged positions. Few studies have addressed this issue. As a benchmark analysis of demographic and socioeconomic compositions of China's minorities, Poston and Shu provided little information on temporal changes as they employed data from the 1982 census only.²³ Maurer-Fazio, Hughes and Zhang's inter-censal analyses revealed a temporal trend from 1982 to 2000 but reported very little on minority-Han differentials in labor force participation.²⁴ Gustafsson and Li found that the ethnic minority-Han income gap had enlarged from 1988 to 1995 in rural China.²⁵ Hasmath, Ho and Liu, surprisingly, found little wage differentials between minorities and Han in urban China's labor market with no change from 1989 to 2006.²⁶ Their results may be attributable to the fact that the samples were drawn from the nine provinces that are representative of the whole country, especially with respect to the geographic distribution of ethnic minorities. In the analyses of household survey data, ethnic minorities are typically treated as a single group and the heterogeneity among minorities is largely neglected. In this article, we attempt to remedy these problems and provide an updated and systematic examination of ethnic stratification, namely whether ethnic minorities are losers or winners in the context of China's rapid economic growth, uneven regional development, and further marketization since the 1990s.

²⁰ Sautman 1998.

²¹ Zang 2010.

²² Hasmath, Ho and Liu 2012.

²³ Poston and Shu 1987.

²⁴ Maurer-Fazio, Hughes and Zhang 2009.

²⁵ Gustafsson and Li 2003.

²⁶ Hasmath, Ho and Liu 2012.

DATA, VARIABLES AND METHODS

The data we analyze here are extracted from a series of Chinese population censuses in 1982, 1990, 2000, and the mini-census in 2005, which include information on individuals' ethnicity, education, and occupation (only for those aged 15 and above). For each recognized ethnic group, a standard code is assigned (see Table 1). Because the classification of education varies across censuses, we group education into four levels: 1=primary school or below; 2=junior high school; 3=senior high school or equivalent; and 4= college or above. Following the census tabulation data, we group occupations into six broad categories: 1=managers; 2=professionals; 3=office clerical staff; 4=sales and service workers; 5=production workers; and 6=farmers. Based on the micro-data with detailed address information, we employ a fine-tuned spatial unit—the prefecture—to examine minority-Han disparities in specific local contexts.

As previously mentioned, the censuses typically fail to supply information on labor market outcomes that are crucial to this investigation. The mini-census in 2005, for the first time, collected information on respondents' earnings, employment status, occupation (2-digit code), work unit sector, working hours, and fringe benefits, in addition to *hukou* status, place of *hukou* registration, current place of residence, education and other demographic characteristics that are also available in the 2000 census.²⁷ The mini-census in 2005, combining the advantages of both the censuses (large sample size) and the surveys (relatively detailed information), is ideally suited to the investigation of labor market stratification between the ethnic minorities and Han Chinese.²⁸ We analyze a large subsample of the mini-census data (N=1,539,798), with 168,301 being minorities. About half of the subsample were employed on a full-time basis in the non-agricultural sectors at the time of the survey (N=727,416), with 41,608 being minorities.

The key dependent variable is the logarithm of monthly earnings, calculated as all work-related income but not nonworking income such as property income and transferred income. Ethnicity is coded both as a single dummy variable (minority vs. Han) and as 19 dummy variables (18 minority groups plus the “others” group consisting of the remaining 37 minority groups vs. Han). The employment sector is coded into four nonagricultural categories, in addition to the agricultural sector: government/public institution, public enterprise, private enterprise, and the self-employed.

²⁷ Wu 2014.

²⁸ See Wu and Song 2014 for an example.

Other independent variables include education, gender, experience, *hukou* status, weekly work hours, occupation, and prefecture. Education is measured in four levels (1=primary school or below, 2=junior high school, 3=senior high school, and 4=college or above). Gender is coded as a dummy variable (male=1) as is *hukou* status (rural=1). We approximate respondents' work experience by subtracting 18 from the reported age and also adding a square term to capture the curvilinear relationship between work experience and earnings attainment. Weekly working hours (as a continuous measure) and occupation and prefecture (as a set of dummies) are included in the regression models as control variables.

We employ the index of dissimilarity (ID)²⁹—a demographic measure of how evenly two groups are distributed across categories—to summarize ethnic differentials in regional distribution, educational disparities and occupational segregation, in order to document the temporal trend from 1982 to 2005. ID can be computed as follows:

$$ID = \frac{1}{2} \sum_{j=1}^k |P_{ij} - P_{0j}|,$$

where P_{ij} denotes the proportion of a minority group i in the j th category among the minority population, P_{0j} denotes the proportion of Han in the j th category among the Han population, and k denotes the number of categories for the variables of interest (province/prefecture, education, and occupation). Ranging from 0 to 100, ID has been used extensively as a measure of inequality in studies of social stratification. In the context here, ID represents the minimum proportion of individuals of either a specific minority group or the Han group that would have to shift to a different category in order to produce an even distribution (in either region, or education, or occupation) between the two groups.

After briefly documenting the temporal trend in geographic distribution, and educational and occupational attainment of minority groups relative to Han, we focus on the analyses of data from the mini-census in 2005 to examine the Han-minority earnings disparities in non-agricultural sectors. To investigate the ethnic earnings inequality among the non-agricultural labor forces, we employ linear regression models with multivariate controls. To reveal the heterogeneity among ethnic minorities in terms of their socioeconomic development, we compare among the 18 ethnic minority groups. We also analyze the minority-Han earnings differentials across employment sectors.

²⁹ Duncan and Duncan 1955.

RESULTS

Ethnic Disparities in Geographic Distribution, and Educational and Occupational Attainment

Previous research has shown that ethnic socioeconomic differentials can be explained largely by regional inequality.³⁰ We compute the provincial segregation index for all minority groups as a whole and also for each of the 18 minority groups (vs. Han). As shown in Table 2, there is a slight increase in the segregation index from 1982 to 1990, followed by a decline from 68.02 percent in 1990 to 58.12 percent in 2010, probably due to inter-provincial migration that took place in the 1990s. However, such a temporal pattern varies by minority group. While some groups (e.g., Mongol 蒙古, Zhuang 壮, Bouyei 布衣, and Korean 朝鲜) show a monotonic trend in spatial integration with the Han population, others continue to remain segregated from the Han over the decades, with some even becoming more segregated perhaps because more Han people in the ethnic regions have migrated out.

The Hui people are the most geographically dispersed minority group, with their segregation index remaining the lowest out of all (18/19?) groups from 1982 to 2010. The Uyghurs (维吾尔) who mainly live in Xinjiang, on the other hand, appear to be the most segregated minority in China, with a segregation index of 99.33 percent in 1982 and 98.60 percent in 2010. The segregation index for Tibetans, dispersed in several provinces in southwestern China (Tibet, Qinghai 青海, Sichuan 四川 and Yunnan 云南), shows an increasing trend from 85.05 percent in 1982 to 88.38 percent in 2010.

As Figure 1 shows, most ethnic minorities are indeed concentrated in a certain prefecture or county within a province. The value of the index of dissimilarity could be affected by the number of geographic units in the calculation. In Table 2 we also calculate the segregation index at the prefectural level for 1982, 1990, and 2005 (in parentheses).³¹ Results show that, while the segregation index is in general higher at the prefectural level than at provincial level, the temporal trends described above actually become more salient.

³⁰ Hannum and Xie 1998.

³¹ The sample of micro-data from the 2000 census that we have access to (1 per thousandth) does not allow such calculation at the prefectural level.

Table 2: Provincial Segregation Index of China's Major Ethnic Minorities, 1982-2005

Census Code	Ethnic Group	1982	1990	2000	2005
	Overall	62.03	68.02	59.12	58.12
2	Mongol	84.98 (90.03)	79.70 (87.84)	79.54	75.85 (84.35)
3	Hui	52.09 (60.60)	52.68 (66.96)	49.50	53.38 (67.17)
4	Tibetan	85.05 (98.46)	85.42 (98.37)	87.36	87.03 (96.58)
5	Uyghur	99.33 (99.34)	99.18 (99.23)	98.71	98.47 (98.48)
6	Miao	75.67 (91.76)	75.61 (92.23)	77.90	77.90 (84.71)
7	Yi	84.97 (94.97)	85.34 (95.26)	87.55	87.53 (92.70)
8	Zhuang	94.01 (95.77)	92.88 (94.91)	90.02	89.67 (89.89)
9	Bouyei	96.43 (97.74)	96.28 (97.49)	92.24	90.48 (91.44)
10	Korean	87.52 (90.41)	86.54 (88.63)	84.04	78.09 (80.61)
11	Manchu	79.60 (83.17)	78.77 (82.9)	79.63	79.19 (80.91)
12	Dong	87.69 (96.64)	86.91 (96.43)	84.40	83.75 (90.13)
13	Yao	82.02 (82.02)	84.11 (94.00)	80.19	79.72 (88.09)
14	Bai	94.85 (96.90)	94.05 (96.53)	88.51	90.12 (94.70)
15	Tujia	77.00 (98.07)	77.26 (95.57)	81.12	80.17 (87.70)
16	Hani	95.16 (99.33)	97.00 (99.24)	96.51	96.18 (98.92)
17	Kazak	98.90 (99.33)	99.14 (99.24)	98.92	97.14 (98.92)
18	Dai	97.03 (98.27)	94.88 (97.10)	95.96	95.09 (96.72)
19	Li	90.81 (98.03)	96.69 (97.94)	96.07	95.71 (96.45)

Notes: Figures in the parentheses are segregation index calculated at the prefectural level.

In modern society, education is the main basis for social stratification.³² We compare between ethnic minorities and Han in terms of their educational attainment from 1982 to 2005, and calculate the segregation index in Table 3 (left panel) for all 18 minorities as a group, and for each of the 18 minorities. The temporal trends in educational disparities become even more evident, increasing from 8.83 in 1982 to 19.68 in 2005. Even though the index *per se* does not tell us which group is advantaged or disadvantaged, our substantive knowledge of ethnic stratification in China suggests that, with a few exceptions, minorities in general are lagging behind Han in educational attainment. Educational expansion over the past three decades seems to have benefited the Han more than the ethnic minorities, which is probably a result of the uneven development of regional economies in China.³³

We further investigate the disparities in occupational attainment between ethnic minorities and Han from 1982 to 2005, and compute the occupational segregation index in the right panel of Table 3. Results show that, the occupational segregation index was very low in 1982, because the majority of the Chinese adult population worked in agriculture regardless of whether they were Han and minorities. Over time, the index for all minorities increased monotonically from 3.59 percent in 1982, to 4.66 percent in 1990, 16.12 percent in 2000 and 23.81 percent in 2005. This pattern holds consistently for most of the 18 minority groups under study. Two factors may account for this trend. First, the increasing educational disparities may lead to a changing occupational distribution between minorities and Han. Second, China's economic miracle since the reform has been accompanied by a transformation from the agriculture-dominated occupational structure to the manufacturing and service-dominated structure in the labor markets, and migration from inland villages to coastal cities. In these processes, the Han people are much more likely to take advantage of the newly available opportunities and move to a variety of non-agricultural occupations, resulting in the enlarged segregation indexes over time.

The analyses above provide a sketchy description of how minorities have fared in educational and occupational attainment with reference to the Han in the context of China's uneven regional development. As we all know, differentials in education and occupation will eventually lead to earnings inequality in the labor markets. The census data we have access to contain no information on earnings, employment sectors, etc., but such information is available from the 2005 mini-census.

³² Blau and Duncan 1967.

³³ Wu 2010.

Table 3: Index of Dissimilarity in Educational Attainment and Occupational Distribution between Ethnic Minorities and Han in China, 1982-2005

Census Code	Ethnic group	Education				Occupation			
		1982	1990	2000	2005	1982	1990	2000	2005
	All non-han	8.83	11.30	13.87	19.68	3.59	4.66	16.12	23.81
2	Mongol	3.54	9.68	2.08	5.57	6.76	8.90	10.85	18.40
3	Hui	0.95	3.59	10.09	15.15	4.59	3.50	6.00	7.44
4	Tibetan	28.70	37.22	43.14	47.71	5.95	8.15	24.16	29.99
5	Uyghur	13.16	16.56	16.29	10.70	3.18	3.10	16.29	10.70
6	Miao	19.94	20.94	24.94	29.46	19.94	20.94	18.41	29.92
7	Yi	23.34	29.05	31.64	35.29	8.56	10.68	27.85	37.44
8	Zhuang	5.45	10.27	8.52	9.40	6.50	8.69	17.30	19.95
9	Bouyei	18.69	24.33	26.18	26.16	7.83	11.10	24.31	29.44
10	Korean	31.58	28.32	23.65	17.87	8.87	9.11	21.77	14.56
11	Manchu	11.54	9.68	4.88	8.36	6.51	3.47	4.17	6.51
12	Dong	14.85	14.09	15.58	16.55	7.38	7.95	18.24	19.36
13	Yao	17.59	20.00	15.02	21.07	8.05	9.99	22.58	26.16
14	Bai	9.65	13.30	12.79	16.92	3.55	9.76	16.57	28.44
15	Tujia	7.61	11.53	14.23	13.51	6.42	8.16	17.17	19.47
16	Hani	25.73	33.40	34.93	40.22	8.80	12.19	28.22	34.19
17	Kazak	2.94	7.10	10.19	6.63	6.86	4.81	20.06	25.24
18	Dai	24.07	27.29	32.80	33.94	8.26	9.89	27.74	31.47
19	Li	8.73	6.20	9.13	11.33	7.14	9.30	25.29	34.19

Ethnic Earnings Inequality: Evidence from the 2005 Mini-census

Notwithstanding the fact that it is a cross-sectional survey, the mini-census in 2005, with its large sample size and comprehensive coverage of all regions in China, provides a unique source of information that allows a thoughtful research design to address the research questions in this article.³⁴ Table 4 presents the descriptive statistics for all variables included in our analyses of the mini-census data. To show the ethnic difference in these characteristics, we also present the descriptive statistics for Han and minorities separately. The left panel is for the full sample, whereas the right panel is for the urban non-agricultural sample only (full-time employment).

As results in the left panel of Table 4 show, out of all 1,539,798 respondents, 1,371,497 (89.1 percent) are Han while 168,301 (10.9 percent) are minorities. Confirming the patterns previously found in Table 3, ethnic minorities are less educated than Han, and they tend to concentrate in agricultural and self-employment sectors, and earn less than Han Chinese. To give an example, among the Han Chinese, 25.0 percent received senior high school education or above; 46.1 percent worked in the agriculture sector and 46.8 percent were farmers, although 72.3 percent held rural *hukou* status. In contrast, among ethnic minorities, 14.3 percent received senior high school education or above; 70.4 percent worked in agriculture and 71.8 percent were farmers. It is notable that 85.0 percent of minorities held rural *hukou* status. Therefore, Han people are more likely than minorities to be engaged in non-farm jobs, and the huge difference in monthly earnings of 40.6 percent ($[722.4-429.4]/722.4$) between Han and minorities could be associated with the rural-urban divide and differential educational and occupational attainments.

In the right panel of Table 4, we focus on 727,416 non-agricultural samples. The ethnic disparities seem to be small in the non-agricultural sector. Indeed, minorities fared quite well in terms of educational and occupational attainment: 23.04 percent attended college (vs. 18.51 percent for Han); 29.9 percent worked in government/institutions (vs. 14.47 percent for Han); 3.90 percent were managers and 21.04 percent were professionals (vs. 3.77 percent and 15.41 percent, respectively, for Han). Although minorities were still disadvantaged in monthly earnings, the gap was much smaller in the non-agriculture sample than in the full sample, probably due to their relatively better positions in urban labor markets resulting from the Chinese government's long-standing favorable policies towards them.

³⁴ Wu 2014.

Table 4. Descriptive Statistics for Selected Variables from China's 2005 Mini-Census

	Full Sample			Non-agricultural Sample		
	Overall	Han	Minorities	Overall	Han	Minorities
Monthly income	690.4 (884.14)	722.43 (906.62)	429.4 (614.21)	1098.77 (1099.00)	1107.42 (1105.01)	956.15 (983.82)
Education:						
Primary or below	31.02	28.13	54.51	12.7	12.35	18.39
Junior High	45.01	46.72	31.13	43.6	44.07	35.93
Senior High	23.97	15.64	8.33	43.7	43.58	45.58
College or above	9.13	9.5	6.03	18.77	18.51	23.04
Experience	21.18 (10.39)	21.14 (10.38)	21.49 (10.46)	17.96 (9.59)	18.02 (9.60)	17.06 (9.31)
Employment sector						
Gov't/institution	7.39	7.49	6.52	15.07	14.47	24.94
Pubic firms	10.44	11.2	4.29	21.11	21.45	15.4
Private/other	14.50	15.53	6.13	29.58	29.96	23.41
Self-employed	18.92	19.69	12.67	34.25	34.12	36.26
Agriculture	48.75	46.1	70.39	-	-	-
Occupation:						
Managers	1.91	2.01	1.05	3.77	3.77	3.9
Professional	8.91	9.09	7.44	15.73	15.41	21.04
Office clerk	4.66	4.86	3.05	9.56	9.48	10.92
Sales/service workers	14.31	15.19	7.14	28.92	29.02	27.24
Unskilled workers	20.7	22.07	9.56	42.02	42.33	36.9
Famer	49.51	46.78	71.78	-	-	-
Working hours	46.76 (12.91)	46.74 (13.0)	46.86 (12.46)	49.87 (10.83)	49.88 (10.82)	49.53 (0.11)
Female	45.34	45.17	46.79	39.19	39.22	38.75
Rural hukou	73.67	72.28	84.98	48.24	48.36	46.38
N	1,539,798	1,371,497	168,301	727,416	685,808	41,608

Notes: The numbers in the parentheses are standard deviations. The non-agricultural sample is restricted to those individuals who were employed full-time (i.e. working at least 35 hours per week).

In Table 5, we further investigate earnings inequality between ethnic minorities and Han in multivariate linear regression models. The dependent variable is the logarithm of monthly earnings. In Model 1 we include ethnic minorities as a dummy variable only. Consistent with the results presented in Table 4, ethnic minorities earned 14.1 percent ($e^{-0.152}-1$) less than Han, and the difference is statistically significant ($p<.001$). In Model 2, we add education, experience and its square term, gender, *hukou* status and weekly working hours as control variables. While all these individuals' attributes have significant effects on earnings as expected, the ethnic earnings gap persists and is even slightly enlarged: ethnic minorities earn 15.5 percent ($e^{-0.168}-1$) less than Han after we control for the effect of these individual characteristics.

Table 5. Estimated Coefficients for Linear Regression on Monthly Earnings of Ethnic Groups (Minorities vs. Han) in China, 2005

	Model 1		Model 2		Model 3		Model 4	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Ethnicity ¹								
All Minority	-0.152***	0.003	-0.168***	0.003	-0.158***	0.003	-0.044***	0.003
Education ²								
Junior H S			0.132***	0.002	0.120***	0.002	0.124***	0.002
Senior H S			0.312***	0.003	0.275***	0.003	0.256***	0.002
College or above			0.424***	0.002	0.387***	0.002	0.353***	0.002
Experience			0.010***	0.000	0.011***	0.000	0.017***	0.000
Experience ² /100			-0.025***	0.001	-0.026***	0.001	-0.041***	0.001
Female			-0.235***	0.001	-0.227***	0.001	-0.250***	0.001
Rural <i>hukou</i>			-0.007***	0.002	-0.010***	0.002	-0.073***	0.002
Work hours /100			-0.016*	0.007	0.049***	0.007	0.030***	0.006
Employment sector ³								
Public enterprise					0.111***	0.002	0.029***	0.002
Private enterprise					0.174***	0.003	0.001	0.002
Self-employed					0.035***	0.003	-0.004	0.002
Occup. dummies	No		No		Yes		Yes	
Pref. dummies	No		No		No		Yes	
Constant	6.794***	0.001	6.546***	0.005	6.380***	0.006	6.020***	0.021
R ²	0.003		0.186		0.216		0.358	
N	727,416		722,350		722,350		722,350	

Notes: ¹ Han as the reference group; ² primary school or below as the reference group; ³ government/institutions as the reference group; ⁴ * p<.05 ** p<.01 *** p<.001.

In Model 3 of Table 5, we further introduce employment sector and occupation as a set of dummy variables and find significant variations among workers in different employment sectors: those who worked in public or private enterprises or who were self-employed all enjoyed net earnings advantages of 11.7 percent ($e^{0.111}-1$), 19.0 percent ($e^{0.174}-1$), or 3.56 percent ($e^{0.035}-1$), respectively, over those who worked in the government and public institutions. Although we have taken into account the effect of employment sector and occupation, ethnic disparities have not reduced substantially. Nevertheless, after further controlling for the effect of prefecture in Model 4, the sectoral variation is reduced to a negligible level, and the ethnic earnings inequality almost disappears. Other things being equal, ethnic minorities now earn only 4.3 percent ($e^{-0.044}-1$) less than their Han counterparts, and the difference is still statistically significant ($p<.001$). Therefore, it seems that because of the geographic distribution of ethnic minorities, ethnic stratification in China is largely associated with the regional socioeconomic development.³⁵

As noted above, there is substantial heterogeneity among Chinese ethnic minorities. In Table 6, we replicate Models 2-4 of Table 5 but compare among the 18 sizable minority groups plus the “others” group consisting of the remaining 37 non-sizable minority groups. In general, ethnic minorities are disadvantaged in earnings, but this is not necessarily true for every minority group. As results in Model 1 show, while most minorities earn significantly less than the Han, Koreans actually enjoy a great advantage of 26.5 percent ($e^{0.235}-1$) over the Han and Mongols do not differ from the Han in earnings attainment. After controlling for the effect of a set of variables (including prefecture) in Model 4, Koreans’ great advantage persists (28.4 percent [$e^{0.250}-1$]), but now Manchu also enjoys a slight advantage of 1.82 percent ($e^{0.018}-1$) over the Han; Mongols, Bai, Hui, Dai do not differ significantly from the Han in earnings, whereas the remaining 12 minority groups earn much less than their Han counterparts.

³⁵ Xie and Hannum 1996; Xie and Wu 2009.

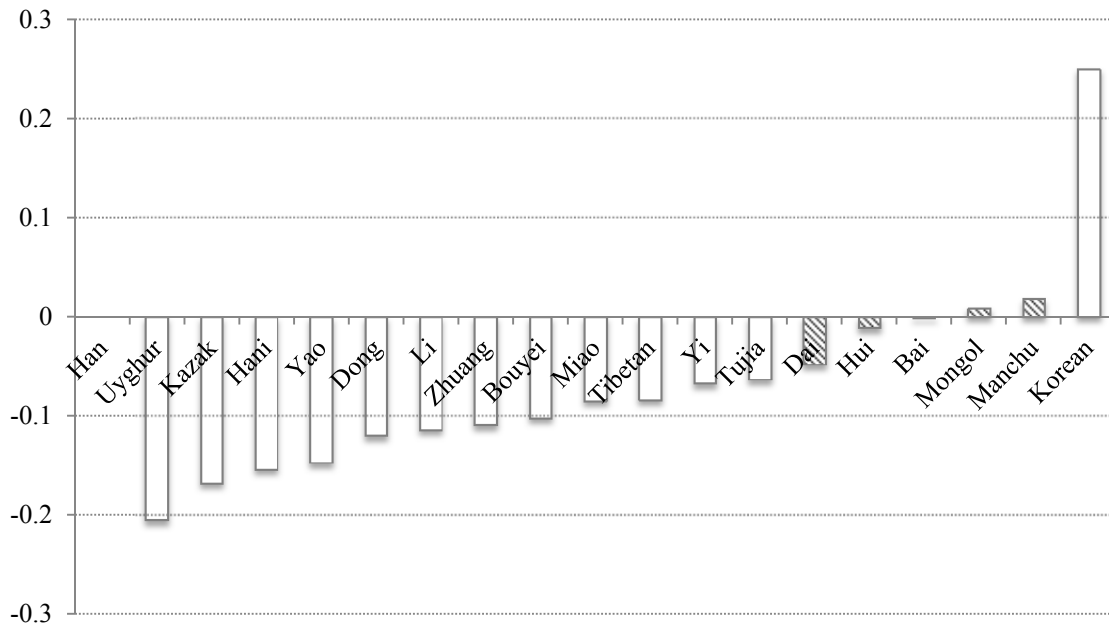
Table 6. Estimated Coefficients for Linear Regression on Monthly Earnings of Ethnic Groups (Individual Minority Group vs. Han), 2005

	Model 1		Model 2		Model 3		Model 4	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef	S.E.
Ethnicity¹								
Mongol	-0.016	0.012	-0.130***	0.011	-0.114***	0.011	0.009	0.010
Hui	-0.101***	0.008	-0.119***	0.007	-0.104***	0.007	-0.011	0.006
Tibetan	-0.157***	0.013	-0.273***	0.011	-0.269***	0.011	-0.084***	0.015
Uyghur	-0.329***	0.013	-0.406***	0.012	-0.366***	0.012	-0.205***	0.015
Miao	-0.157***	0.013	-0.129***	0.012	-0.130***	0.012	-0.085***	0.011
Yi	-0.236***	0.014	-0.241***	0.013	-0.231***	0.013	-0.067***	0.012
Zhuang	-0.229***	0.008	-0.204***	0.007	-0.195***	0.007	-0.109***	0.008
Bouyei	-0.198***	0.024	-0.191***	0.021	-0.190***	0.021	-0.102***	0.020
Korean	0.235***	0.018	0.132***	0.016	0.125***	0.016	0.250***	0.015
Manchu	-0.060***	0.009	-0.108***	0.008	-0.104***	0.008	0.018*	0.008
Dong	-0.176***	0.019	-0.149***	0.017	-0.154***	0.017	-0.125***	0.016
Yao	-0.230***	0.019	-0.222***	0.017	-0.216***	0.017	-0.147***	0.016
Bai	-0.093***	0.021	-0.136***	0.019	-0.119***	0.018	-0.001	0.019
Tujia	-0.122***	0.012	-0.116***	0.011	-0.110***	0.011	-0.063***	0.011
Hani	-0.284***	0.031	-0.299***	0.028	-0.288***	0.028	-0.154***	0.027
Kazak	-0.105**	0.032	-0.293***	0.029	-0.258***	0.029	-0.168***	0.027
Dai	-0.311***	0.033	-0.222***	0.030	-0.200***	0.029	-0.048	0.028
Li	-0.310***	0.027	-0.285***	0.024	-0.264***	0.024	-0.114***	0.023
Others	-0.153***	0.012	-0.161***	0.011	-0.152***	0.011	-0.069***	0.010
Education²								
Junior H S			0.129***	0.002	0.117***	0.002	0.123***	0.002
Senior H S			0.309***	0.003	0.271***	0.003	0.254***	0.002
College or above			0.425***	0.002	0.386***	0.002	0.352***	0.002
Experience			0.010***	0.000	0.011***	0.000	0.017***	0.000
Experience ² /100			-0.025***	0.001	-0.026***	0.001	-0.041***	0.001
Female			-0.235***	0.001	-0.227***	0.001	-0.250***	0.001
Rural hukou			-0.007***	0.002	-0.009***	0.002	-0.073***	0.002
Work hours /100			-0.018**	0.007	0.049***	0.007	0.031***	0.006
Employment sector³								
Public enterprise					0.109***	0.002	0.028***	0.002
Private enterprise					0.172***	0.003	0.000	0.002
Self-employed					0.033***	0.003	-0.006*	0.002
Occup. dummies	No		No		Yes		Yes	
Pref. dummies	No		No		No		Yes	
Constant	6.794***	0.001	6.550***	0.005	6.386***	0.006	6.022***	0.021
R ²	0.005		0.187		0.217		0.359	
N	727,416		722,350		722,350		722,350	

Notes: ¹ Han as the reference group; ² primary school or below as the reference group; ³ government/institutions as the reference group; ⁴ * p<.05 ** p<.01 *** p<.001.

Figure 2, which plots the mean difference in the logarithm of monthly earnings between each of the minority groups and the Han majority, shows the diverse pattern of ethnic stratification. On the left side, the Uyghurs and the Kazaks, who mainly reside in Xinjiang, are performing the worst among all minorities, followed by Hani 哈尼, Yao 瑶, Dong 侗, Li 黎, Zhuang 壮, Bouyei 布衣, Miao 苗, Tibetan 藏, Yi 彝, and Tujia 土家. Other things being equal, the Uyghurs earn 18.5 percent ($e^{-0.205} - 1$) and the Kazaks earn 15.5 percent ($e^{0.168} - 1$) less than their Han counterparts. On the right side, Koreans in Jilin 吉林 province stand out for their significant earnings advantages.

Figure 2. Adjusted Mean Difference in Logged Monthly Earnings between Selected Minorities and Han



Notes: Based on results in Table 6; the difference between Han and Dai, Hui, Bai, or Mongol is statistically insignificant at the 0.05 level.

Finally, the primary interest of this article is to examine how ethnic minorities have fared in the course of China’s rapid social and economic changes. Due to the lack of available longitudinal data, we approximate the changes over time by variations in ethnic inequalities across employment sectors (government/public institutions, public enterprises, private enterprises, and self-employment). These sectors constitute a continuum representing the declining influence of the state and the increasing influence of market forces in labor markets.³⁶

³⁶ Wu 2013; Wu and Song 2014.

In Table 7, we run regression models on the logarithm of earnings separately for each sector, first with ethnic minority as a dummy variable, and then with a set of dummy variables for the 19 ethnic groups (with Han as the reference group). In two sets of analyses, we control for education, experience and its squared term, gender, *hukou* status, work hours, occupation and prefecture dummies. To conserve space, the coefficients of these variables are not reported here.

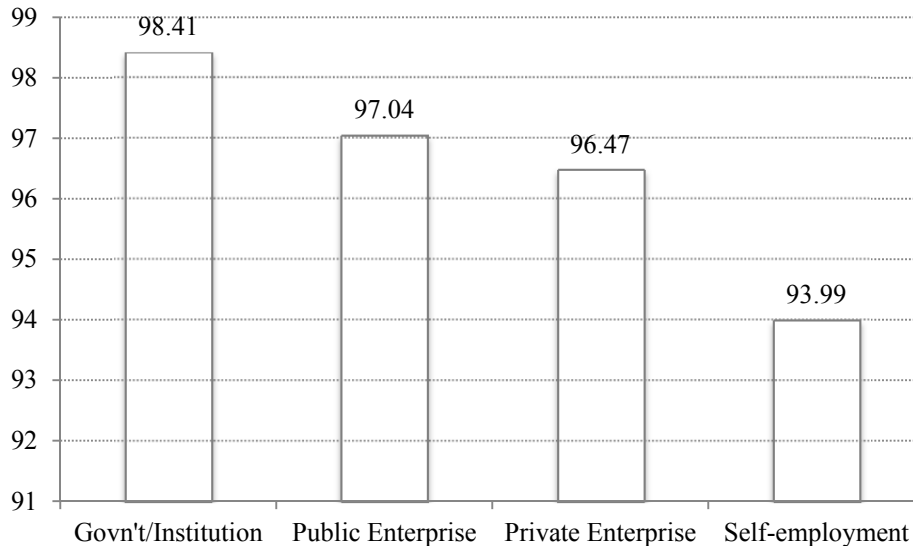
Table 7. Estimated Coefficients for Linear Regression on Monthly Earnings by Sector, Urban China, 2005

	Gov't/institution		Public Enterprises		Private Enterprises		Self-employment	
	Coef.	S.E.	Coef	SE	Coef	SE	Coef	SE
Ethnicity ¹								
All Minority	-0.016**	0.005	-0.030***	0.006	-0.036***	0.005	-0.062***	0.006
Mongol	0.016	0.014	-0.029	0.023	0.010	0.023	-0.025	0.021
Hui	0.014	0.012	-0.009	0.012	-0.002	0.013	-0.009	0.012
Tibetan	0.039*	0.020	0.081	0.045	0.098**	0.038	-0.389***	0.027
Uyghur	-0.039	0.020	-0.231***	0.032	-0.214***	0.044	-0.371***	0.028
Miao	-0.047*	0.021	-0.058*	0.029	-0.081***	0.016	-0.096***	0.023
Yi	-0.056**	0.018	-0.041	0.030	-0.064**	0.023	-0.076***	0.023
Zhuang	-0.076***	0.017	-0.132***	0.022	-0.089***	0.011	-0.077***	0.016
Bouyei	0.014	0.034	-0.068	0.051	-0.107***	0.031	-0.159***	0.041
Korean	0.113***	0.028	0.186***	0.034	0.248***	0.025	0.328***	0.030
Manchu	-0.010	0.014	0.010	0.014	0.037**	0.014	0.017	0.015
Dong	0.009	0.031	-0.044	0.041	-0.153***	0.023	-0.128***	0.034
Yao	-0.108***	0.026	-0.279***	0.046	-0.091***	0.024	-0.157***	0.031
Bai	-0.034	0.029	0.038	0.043	0.095*	0.068	-0.042	0.035
Tujia	-0.045*	0.020	-0.042	0.031	-0.061***	0.016	-0.036	0.021
Hani	-0.083*	0.037	-0.105	0.070	-0.095	0.068	-0.194***	0.047
Kazak	0.045	0.029	-0.074	0.082	0.014	0.131	-0.475***	0.062
Dai	0.001	0.046	0.002	0.075	-0.019	0.060	-0.068	0.045
Li	-0.066*	0.033	-0.127*	0.052	-0.184***	0.044	-0.147***	0.043
Others	-0.034*	0.016	-0.029	0.026	-0.057**	0.019	-0.123***	0.020
Control variables:								
Education	Yes		Yes		Yes		Yes	
Experience	Yes		Yes		Yes		Yes	
Female	Yes		Yes		Yes		Yes	
Rural <i>hukou</i>	Yes		Yes		Yes		Yes	
Working hours	Yes		Yes		Yes		Yes	
Occup. dummies	Yes		Yes		Yes		Yes	
Pref. dummies	Yes		Yes		Yes		Yes	
N	108,285		152,216		213,153		248,696	

Notes: ¹ Han as the reference group; ² control variables include education, experience and its squared term, female, rural *hukou*, work hours, occupation and prefecture dummies; ³ * p<.05 ** p<.01 *** p<.001.

As expected, the minority-Han earnings disparity was larger within sectors that saw declining state protection of minorities. Other things being equal, ethnic minorities earned 1.59 percent ($e^{-0.016}-1$) less in government/public institutions, 2.96 percent ($e^{-0.030}-1$) less in public enterprises, 3.54 percent less ($e^{-0.036}-1$) in private enterprises, and 6.01 percent less ($e^{-0.062}-1$) in self-employment than Han Chinese. All these coefficients are statistically significant ($p<.01$). The results of Wald tests further confirm that the differences among coefficients across equations (sectors) are highly significant ($p<0.001$). Figure 3 plots the earnings of minority relative to Han locals (equal to 1) across the four sectors. With the weakening of government intervention in the labor markets, ethnic inequality between minorities and Han tends to increase.

Figure 3. Percentage of Minorities’ Earnings Relative to Han’s, by Employment Sector



Notes: Based on the coefficients in the first row of Table 7.

Unlike the findings reported for a specific region such as Xinjing,³⁷ the magnitudes of the earnings gap do not seem to be substantial in any of the four sectors, probably due to the fact that the notable disadvantages of certain ethnic groups may be offset by the better standings of other minorities relative to the Han. To further discern the pattern, we consider the 18 minority groups individually. Consistent with the results in Table 6, we see huge variations among minorities in terms of their socioeconomic relation with Han across the employment sectors. Within the sector of

³⁷ Wu and Song 2014.

government and public institutions, two of the 18 minority groups (Korea and Tibetan) earn significantly more than Han; nine of them (Mongol, Hui, Uyghur, Bouyi, Manchu, Dong, Bai, Kazak, Dai) do not differ from Han in earnings, and the remaining seven are slightly disadvantaged in earnings compared to Han. The pattern applies also to the sector of public enterprises (with the exception of Uyghur). Ethnic egalitarianism seems to have remained effective mainly in government/public institutions and in public enterprises after decades of economic reform. Those minorities in the private enterprises and in self-employment, where the enforcement of state ethnic policies tended to be weaker, were responsible for the majority of the disadvantages facing minorities as a group.

SUMMARY, CONCLUSION AND DISCUSSION

In this article we analyzed the data from a series of population censuses/mini-census to examine the temporal trend in socioeconomic differentials between ethnic minorities and the Han in China. Specifically, we compared 18 minority groups, each with populations of at least 1 million, to Han Chinese in terms of their geographic distribution, education, occupation, and earnings attainment over the past decades. We showed that, while regional distribution of ethnic minorities remained relatively stable, occupational segregation and educational disparities between minorities and Han at the national level, measured by the index of dissimilarity, have increased over time since 1982. These patterns are closely associated with the uneven development in educational investment, population migration, and economic transformation across regions in the same period. These findings bore important implications for how minorities have fared in labor markets in the course of China's social and economic changes.

In this context, we examined the labor market outcomes and economic wellbeing of ethnic minority based on the 2005 population mini-census. The multivariate analyses revealed that ethnic minorities were disadvantaged in earnings attainment compared to Han, even after controlling for the prefecture fixed effect, and that the minority-Han earnings differentials vary across employment sectors. The gap was smallest among those in government or public institutions, but it increased among those in public enterprises and private enterprises, and was the largest among the self-employed. Given the lack of longitudinal data, we used the four sectors as a continuum to represent the decline in the influence of the state and the increase of market forces in labor markets. Those minorities in the private sector and in self-employment contributed to the majority of the

disadvantages facing minorities as a group. We thus concluded that, overall, the dramatic economic and social changes in China over the past two decades have pushed ethnic minorities into more disadvantaged positions in the labor markets than before.

Chinese ethnic minorities were, by no means, monolithic. We found great heterogeneity within each of the 18 minority groups under study with respect to their socioeconomic relationship with Han. Some were more integrated than others into the Han population and fared better than the Han economically and the marketization seemed to have given them more competitive advantages (e.g., Korean); some showed no difference from Han once regional factors and social and demographic characteristics were taken into account (e.g., Mongol, Hui, and Manchu, Bai, and Dai); and some were disadvantaged to varying degrees compared to Han, and their situations seemed to have worsened in the course of China's rapid economic transitions (e.g. Uyghur and Kazak). Therefore, it would not be surprising if the latter (e.g., Uyghur in Xinjiang) felt frustrated that the increasing economic opportunities created by the booming economy have been disproportionately taken advantage of by Han Chinese.³⁸ The recent massive riots in Tibet (in March 2008) and Xinjiang (in July 2009) as well as the spate of attacks elsewhere in connection with Uyghur were not incidental, but rather rooted in their poor social and economic relations with Han Chinese³⁹. In a context of sharply rising inequality and ethnic reawakening in post-Mao China as well as the growing ethnic conflicts and separatism around the world,⁴⁰ social and political stability in China's border regions depend very much on how ethnic minorities are faring economically.

The Chinese socialist state has long played a visible and direct role in promoting ethnic egalitarianism. As the reform proceeded and the redistributive state gradually retreated from the economic sphere to give way to a competitive labor market, those who used to be under the protection of the state egalitarian policies (e.g., ethnic minorities in this case) tend to lose out and face more disadvantages in the labor markets. After three decades of market reform, the overall ethnic earnings disparities continue to remain small in magnitude, albeit growing in economic sectors more exposed to market competition. While the ethnic unrests in certain regions such as Xinjiang have led some scholars to cast doubts on China's policy towards its ethnic minorities in general, our analyses have shown comprehensively that the socioeconomic relations of minorities

³⁸ Wu and Song 2014.

³⁹ Gilley 2001; Hillman 2008.

⁴⁰ Calhoun 1993; Gladney 1995.

with Han vary substantially from one group to another, contingent upon their unique history and culture, or structural integration into the Han population.⁴¹ Sociologists have conducted much work, both theoretically and empirically, on issues related to ethnicity, immigration, and assimilations in other social contexts over the past few decades.⁴² With the availability of suitable data, future research should be devoted to understanding specific mechanisms through which different patterns of Chinese ethnic stratification are produced in the new era.

⁴¹ See Jankowiak 2013; Zang 2012.

⁴² E.g., Liberson 1963; Gordon 1964.

REFERENCES

- Bhalla, A.S. and Shufang Qiu. 2006. *Poverty and Inequality among Chinese Minorities*. London and New York: Routledge
- Blau, Peter M. and Otis Dudley Duncan. 1967. *The American Occupational Structure*. New York: Wiley.
- Bovingdon, Gardner. 2010. *The Uyghurs, Strangers in Their Own Land*, New York: Columbia University.
- Bulag, Uradyn 2002 *The Mongols at China's Edge: History and the Politics of National Unity*. Lanham, MD: Rowan and Littlefield.
- Cai, Fang and Guanghua Wan. 2006. "Studies on income inequality and poverty in transition China: What do we know and what we should know?" in Fang Cai and Guanghua Wan (ed.) *Income Inequality and Poverty in Transition China*, Beijing, Social Science Academic Press, 1-22.
- Calhoun, Craig. 1993. "Nationalism and Ethnicity." *Annual Review of Sociology*.19:211–239.
- Duncan, Otis Dudley and Beverly Duncan 1955 "A Methodological Analysis of Segregation Index." *American Sociological Review* 20: 201-17.
- Eberhard, Wolfram. 1982. *China's Minorities: Yesterday and Today*. Berkeley: Univ. of California Press.
- Fei, Xiaotong. 1981. *Towards a People's Anthropology*. Beijing: New World Press.
- Fleisher, Belton, Haizheng Min Qiang Zhao 2010. "Human Capital, Economic Growth, and Regional Inequality in China." *Journal of Development Economics*. 92(2): 215-231
- Gilley, Bruce. 2001. "Uighur's Need Not Apply." *Far Eastern Economic Review* 23 August, 2011.
- Gladney, Dru C. 1995. "China's Ethnic Reawakening" East-West Center, *Asia Pacific Issues* 18. <http://scholarspace.manoa.hawaii.edu/handle/10125/3806>, accessed on May 6, 2014.
- Gordon, Milton M. 1964, *Assimilation in American Life: The Role of Race, Religion, and National Origins*. New York: Oxford University Press.
- Gustafsson, Bjorn and Li Shi. 2003. "The Ethnic Minority-Majority Income Gap in Rural China during Transition." *Economic Development and Cultural Change* 51:806-822.
- Gustafsson, Bjorn A. Li Shi, and Terry Sicular (eds.) 2008. *Inequality and Public Policy in China*. Cambridge University Press.
- Hannum, Emily and Yu Xie. 1998. "Ethnic Stratification in Northwest China: Occupational Difference between Han Chinese and National Minorities in Xinjiang, 1982-1990." *Demography* 35(3): 323-33.
- Hannum, Emily. 2002 "Educational Stratification by Ethnicity in China: Enrollment and Attainment in the Early Reform Years." *Demography* 39 (1): 95-117.
- Hao, Lingxin. 2012. "Cumulative Causation of Rural Migration and Initial Peri-Urbanization in China." *Chinese Sociological Review* 44(3): 6–33.
- Harrell, Stevan. 2001. *Ways of Being Ethnic in Southwest China*. Seattle, WA: University of Washington Press.
- Hasmath, Reza. 2008. "The Big Payoff? Educational and Occupational Attainment of Ethnic Minorities in Beijing." *European Journal of Development Research* 20:104-116.
- Hasmath, Reza, Benjamin Ho and Elaine Liu. 2012. "Ethnic Minority Disadvantages in China's Labour Market?" *University of Oxford China Growth Centre Discussion Paper* 16: 1-35.
- Hillman, Ben. 2008. "Money cannot Buy Tibetan's Love." *Far Eastern Economic Review* 171, No. 3, 8-16.
- Howell, Anthony and C. Cindy Fan 2011. "Migration and Inequality in Xinjiang: A Survey of Han and Uyghur Migrants in Urumqi." *Eurasian Geography and Economics* 52 (1): 119-39.

- Information Office of the State Council, 2005. China's Ethnic Area Autonomy. White Papers (Chinese). <http://news.xinhuanet.com/zhengfu/2005-02/28/content_2628105.htm> (accessed 30.11.10, in Chinese).
- Jankowiak, William. 2013. "Urban Mongols: the Flourishing of Multiple Identities in a Vibrant Ethnic Community." *Chinese Sociological Review*, 45(3): 53–73.
- Kaup, Katherine Palmer. 2001. *Creating the Zhuang: Ethnic Politics in China*. Boulder, CO: Lynne Rienner.
- Kanbur, Ravi and Xiaobo Zhang. 2009. "Fifty Years of Regional Inequality in China: A Journey through Central Planning, Reform, and Openness." in Shengen Fan, Ravi Kanbur and Xiaobo Zhang (ed.), *Regional Inequality in China: Trends, Explanations and Policy Responses*. Oxon and New York: Routledge, 64-77.
- Lai, Hongyi Harry. 2002. "China's Western Development Program: Its Rationale Implementation, and Prospects." *Modern China* 28:432-466
- Li, Shi, Hiroshi Sato and Terry Sicular (eds.) 2010. *Rising Inequality in China: Challenge to a Harmonious Society*. Cambridge: Cambridge University Press.
- Liberson, Stanley. 1963 *Ethnic Patterns in American Cities* New York: Free Press
- Mackerras, Colin. 1994. *China's Minorities: Integration and Modernization in the Twentieth Century*. Hong Kong: Oxford University Press.
- Maurer-Fazio, Margaret, James W. Hughes and Dandan Zhang. 2009. "A Comparison and Decomposition of Reform-era Labor Force Participation Rates of China's Ethnic Minorities and Han Majorities." IZA Discussion Paper No 4148.
- National Bureau of Statistics. 2011. "Bulletin on the Major Figures from the Sixth National Population Census in 2010", http://www.gov.cn/test/2012-04/20/content_2118413.htm, accessed Feb. 15, 2014.
- Ou, Dongshu and Ayako Kondo. 2013. "In Search of a Better Life: The Occupational Attainment of Rural and Urban Migrants in China." *Chinese Sociological Review* 46(1):25-59
- Poston, Dudley L. and Jing Shu. 1987. "The Demographic and Socioeconomic Composition of China's Ethnic Minorities." *Population and Development Review* 13(4):703-722.
- Sautman, Barry. 1998. "Preferential Policies for Ethnic Minorities in China: the Case of Xinjiang," *Nationalism and Ethnic Politics* 4(1): 86-118.
- Tsang, Mun-Chun, and Y. Ding 2005. "Resource Utilization and Disparities in Compulsory Education in China." *The China Review* 5:1–31.
- Wu, Xiaogang. 2010. "Economic Transition, School Expansion and Educational Stratification in China, 1990-2000." *Research in Social Stratification and Mobility* 28:91-108.
- Wu, Xiaogang. 2013. "Redrawing the Boundary: Work Units and Social Stratification in Urban China." *Chinese Sociological Review* 45 (4): 6–28.
- Wu, Xiaogang. 2014. "The Census Undertaking in China, 1953-2010." Working Paper.
- Wu, Xiaogang and Xi Song 2014. "Ethnic Stratification amid China's Economic Transition: Evidence from the Xinjiang Uyghur Autonomous Region." *Social Science Research* 44:158-172
- Xie, Yu and Emily Hannum. 1996. "Regional Variation in Earnings Inequality in Reform-era China." *American Journal of Sociology* 101: 950-92.
- Xie, Yu and Xiaogang Wu. 2008. "Danwei Profitability and Earnings Inequality in Urban China." *The China Quarterly* 195: 558-81.
- Zang, Xiaowei. 2010. "Affirmative Action, Economic Reforms, and Uyghur-Han Variation in Job Attainment in Ürümqi." *The China Quarterly* 202:344-62.
- Zang, Xiaowei. 2012. "Uyghur Islamic Piety in Ürümqi, Xinjiang." *Chinese Sociological Review* 44 (4): 82–100.



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