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Abstract

As the redistributive state gradually retreated from the economic sphere to give place to a competitive labor market, those who used to be under the protection of state egalitarian policies tended to lose out and face more disadvantages in the labor markets, whereas those who used to be discriminated against by the socialist state tended to gain more opportunities from economic liberalizations. These predictions are verified by the empirical evidence from Xinjiang in Northwestern China based on an analysis of a sample from the population mini-census in 2005. We show that Han and Uyghur Chinese were segregated into different economic sectors. The Han-Uyghur earnings gap was negligible in government or public institutions, but it increased with the marketization of the employment sector. On the other hand, Han migrants in economic sectors enjoyed particular earnings advantages and *hukou* registration status had no impact on earnings attainment except in government or public institutions. The findings shed new lights on the relationship between ethnicity, migration, and nationalism in the context of China's economic transition.

Introduction

Three decades of dramatic economic and social changes in China have inspired social scientists to assess the impact of these changes on the welfare of different social groups. A large body of literature on Chinese social stratification in the 1990s have addressed changing effects of political capital and human capital in creating inequality, notably, in the framework of the market transition debate (e.g., Nee 1989, 1996; Bian and Logan 1996; Szelényi and Kostello 1996; Walder 2002; Wu and Xie 2003; Xie and Hannum 1996; Zhou 2000). Despite the fact that China's 55 ethnic minorities have historically trailed the Han in terms of a variety of socioeconomic indicators (Poston and Shu 1987), scholars of Chinese stratification have rarely paid attention to how ethnic minorities fare in a rapidly changing society (but see Hannum and Xie 1998; Zang 2008).

This long-lasting disregard reflects the relative small number and heterogeneous composition of these groups in China's population. The 55 ethnic minorities account for less than 10 percent of China's population, and most of them inhabit in rural frontier regions of western China. The disregard also reflects the difficulty of studying this group based on small-scale empirical evidence. National survey data with restricted sizes can hardly support a comprehensive comparison between specific pairs of ethnic minority and Han majority groups (e.g., Bhalla and Qiu 2006; Gustafsson and Li 2003; Hasmath 2008; Hasmath, Ho and Liu 2009; Howell and Fan 2011). While nationwide population census data may provide valuable resources for such analysis, information on workers' earnings and labor force participation is often limited in those data and thus not suitable for the purpose of this study (Maurer-Fazio, Hughes and Zhang 2009).

In contrast to the scarcity of studies on ethnic stratification in China, literatures on the economic disadvantages and social discrimination encountered by the migrant population have flourished since the 1990s (Chan 1996; Wang 2005; Wang, Zuo, and Ruan 2002; Zhang and Wu 2012). The "floating population", which consists of migrants who have resided at the place of destination for at least six months without local household registration status, reached 144 million in 2000 (Liang and Ma 2004) and 147 million in 2006 (National Bureau of Statistics in China 2006). Despite the fact that geographic mobility and job change have become easier than before, rural migrants continue to be denied the rights and benefits of urban citizenship (Liang 2004) and also prevented from access to certain jobs or employment sectors of better economic rewards because they do not hold a local *hukou* (Li 2006; Yao 2001; Zhang and Wu 2012).

While the Chinese government has attempted to reform the *hukou* system to facilitate the socioeconomic inclusion of rural migrants in cities, the inequality among different ethnic groups did not receive much attention from the public until after the recent occurrence of several massive riots, including in Tibet (in March 2008) and in Xinjiang (in July 2009).[1] In addition to political and religious issues, we argue that both riots had their roots in the social and economic relations of Han Chinese with Tibetan and Uyghur people, who strongly felt left behind, as Han locals and migrants from other provinces disproportionately took advantage of the increasing opportunities in China's booming economy (Gilley 2001; Hillman 2008; Jiang 2009). 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 (Calhoun 1993; Gladney 1995, 2004), how ethnic minorities fare economically has important implications for social and political stability in China's border regions.

The trends in ethnic stratification are further complicated by regional inequality and population migration. Both ethnic minorities and migrants are disadvantaged groups compared to the local Han, and the growing regional and rural-urban disparities may have pushed ethnic minorities into even more disadvantaged positions with the competition from the Han migrants who move for better economic opportunities. For example, while government strategies designed to develop western regions have been intended to bring economic prosperity to minorities in China's border regions (Hannum and Xie 1998; Postiglione 1992; Zang and Li 2001), the policies seemed to have failed to deliver. From the ethnic minorities' point of view, the Chinese government's economic policies merely focused on natural resource extraction and the Han Chinese (including migrants) turned out to be the main beneficiaries of the economic growth (Jiang 2009; Yee 2003). Moreover, political suppression and Han in-migration were often blamed for reducing the autonomy of ethnic minorities and aggravating ethnic conflicts in regions such as Xinjiang and Tibet (Becquelin 2000; Koch 2006). On the other hand, the Han see the preferential policies towards ethnic minorities in autonomous regions as discriminations against them, and the large investments and fiscal transfers involved have not mitigated ethnic

[1] The Tibetan riots were a series of riots and demonstrations in the Tibetan Autonomous Region and neighboring Tibetan-inhabited areas in March, 2008. Tibetans clashed with non-Tibetan ethnic groups (Han and Hui migrants) and 19 deaths were reported. The violence in Urumqi of Xinjiang on July 5, 2009 was even more destructive, as the Han Chinese fought back against attacks by Uyghur on a large scale. In this event, 197 people (reported as mostly Han) died, with 1,721 others injured and many vehicles and buildings destroyed (Hu and Lei 2009).

animosity or promote peaceful coexistence (He 2009). To understand the profound social impacts of China's economic transitions on ethnic relations, a systematic examination of ethnic stratification, namely, whether ethnic minorities are losers or winners in the context of China's rapid economic growth and further marketization since the 1990s is thus called for.

Theoretically, scholars have long argued that a social stratification system is built upon the dominant mode of economic integration in that society, and therefore that social inequalities under state socialism are qualitatively different from those under market capitalism (Szelényi 1978, 1983). If so, the institutional transition to a market economy in China since 1978 is likely to have changed social and economic relationships among different social groups. Those who used to be under the protection of the state egalitarian policies tended to lose out and face more disadvantages in the labor markets, whereas those who used to be discriminated against by the socialist state tended to gain more opportunities from economic liberalizations.

While both ethnic minorities and rural Han migrants are disadvantaged groups compared to the Han locals in labor markets, the stratification based on ethnicity and *hukou* status is driven by different institutional mechanisms and processes. On one hand, the Chinese government had long implemented various policies in favor of ethnic minorities to promote their access to educational and job opportunities (Sautman 1998; 2002). As the reform proceeded and the redistributive state gradually retreated from the economic sphere, such preferential policies have been under high pressure and to some extent have given way to competitive labor market mechanisms. Due to a lack of appropriate regulations, ethnic discrimination is becoming more prevalent in China's emerging labor markets (Hasmath, Ho and Liu 2009). On the other hand, the *hukou* system served as an important administrative means for the state to deal with demographic pressures in the course of socialist industrialization since the 1950s, and people with a rural *hukou* are entitled to few of the rights and benefits that the state confers on urban residents (Wu and Treiman 2007). Whereas the injustice faced by migrants has received much attention in recent years, the problem is essentially rooted in the persistence of the *hukou* institution associated with the socialist redistributive economy, and the relaxation of the control on population migration has afforded more economic opportunities for rural farmers, only making the rural-urban divide even more visible than before (Wu 2009; Zhang and Wu 2012). In this regard, the changing dynamics of social stratification based on ethnicity and migration status can shed light on how the institutional transition from a state-planned economy to a market economy have re-shaped the structure of social inequality.

In this paper, we examine the labor market outcomes and economic wellbeing of a large ethnic minority group, Chinese Uyghur, by capitalizing on a large sample from the 2005 population mini-census of Xinjiang, which for the first time collected information on earnings, work unit sector (ownership) and employment status (employer, employee, or self-employed). Compared to remote and isolated Tibetan Autonomous Region, the economic development in Xinjang approaches the national average, and Han constitute about 40 percent of the population (vs. 7.8 percent in Tibet) and the Uyghur 46 percent. [2] As one of the major destinations of internal migration in China, ranked only after Beijing, Shanghai, and Guangdong in the net interprovincial migration rate (Liang and Ma 2004; Howell and Fan 2011), Xinjiang provides an ideal case to examine how the institutional transition from state socialism to market capitalism have affected life circumstances, particularly economic outcomes, of the Uyghur, local Han Chinese, and Han migrants in the labor market.

Due to the lack of available longitudinal data, we approximate the changes over time by variations of ethnic inequalities across different employment sectors. These sectors ordered from government/public institutions, public enterprises, private enterprises, to self-employment constitute a continuum representing the decline in the influence of the state and the increase of market forces in labor markets (see more details in the subsequent session). Our analysis attempts to provide an understanding of the implications of China's economic development on its largest ethnic autonomous region, as well as to shed light on possible explanations for escalating ethnic tensions in this region from a sociological perspective.

Economic Development, Population Migration and Ethnic Preferential Policies

The Xinjiang Uyghur Autonomous Region located in the northwestern China is the country's largest provincial jurisdiction, which takes in one-sixth of the country's total territory and is famous for its abundant oil and gas reserves. The inhabitants of Xinjiang consist of 47 of China's officially recognized ethnic groups, but the Uyghur and the Han are the two major

[2] Of the five autonomous regions (equivalent to provinces) in China, only Tibet has an absolute majority (>50%) of the designated ethnic group, namely, the Tibetans. Xinjiang has a plurality (<50%) of the designated ethnic group, the Uyghur. The remaining 3 autonomous regions (Inner Mongolia, Ningxia Hui and Guangxi Zhuang) have absolute majorities of Han Chinese (State Ethnic Affairs Commission and National Bureau of Statistics 2006).

groups (Information Office of the State Council 2003a). [3] Most of the Han Chinese inhabit the northern part of the region, where the natural conditions are pleasant for living and thus have experienced fast economic development and population growth, whereas for some historical reasons, the native Uyghur dominate the southern part, where most of them live on agriculture and husbandry.

Figure 2 plots the trends in economic growth in Xinjiang since 1978 in terms of GDP per capita and annual economic growth rate as compared to China's national averages. Unlike other ethnic minority autonomous provinces that are often labeled as backward regions, Xinjiang's economy indeed has been performing close to the national average ever since the mid-1990s, owing perhaps to the western development policies launched by China's central government. One of the important goals of these policies is to enhance national unity and social stability by facilitating economic and social development in the west, where 75 percent of China's minority populations live (Goodman 2004; Jiang 2009).[4] Xinjiang has received a particular attention from the central authorities because it borders Central Asia, where the breakup of the Soviet Union in 1989 and the rise of the new republics have fanned hopes for a pan-Turkic revival and a separatist movement, especially among the young (Lai 2002). To contain separatism, China's central government has stepped up its efforts to improve living standards in Xinjiang on the one hand, and to crack down on separatism, terrorism, and religious extremism on the other. Fiscal transfers from the central government to Xinjiang have increased from 5.91 billion RMB in 1996 to 18.4 billion RMB in 2001 (Information Office of the State Council 2003b).

Economic development has, nevertheless, failed to deliver what the policymakers expected. In particular, it has failed to reduce ethnic tensions or to subdue ethnic unrest in the

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[3] There are 5 autonomous regions, 30 autonomous prefectures and 120 autonomous counties/banners in China, covering 71 percent of ethnic minorities and 64 percent of the territory. The head of each autonomous area government must by law be a member of the region's specified ethnic group. The laws also specified limited autonomy in finance, economic planning, arts, science, and culture policies, in the organization of the local police. The use of local minority language is also at least nominally promoted (Information Office of the State Council, 2005).

[4] Of China's officially 592 poor counties, 538 have substantial ethnic minority populations and are located in western regions. Improving the standard of living for people in these areas is seen as the key to solving many inter-ethnic problems (Asian Economic News 2007). The western development strategies cover Chongqing, Sichuan, Guizhou, Yunnan, Tibet, Shaanxi, Gansu, Qinghai, Ningxia, Xinjiang, Inner Mongolia and Guangxi, which account for over 71 percent of the total land area and 29 percent of the total population of China as of 2000 (Yeung and Li 2004).

northwest (Koch 2006). Violence was already on the rise in the 1990s in Xinjiang. In 1998, over 70 serious incidents were reported, causing more than 380 deaths (Becquelin 2000, p87). Prior to the most recent riot in Urumqi in 2009, there had been three major confrontations: an armed rebellion in the Baren township in Akto county in April 1990 (Mackerras 1994, p174); a riot in Yining in February 1997 when thousands Uyghur first demonstrated, demanding East Turkestan independence, then rioted, setting buses and police cars on fire, attacking Han, and storming stores and governmental offices; and then a clash between police and nearly a thousand Uyghur youths rallying in Yining on 24 April 1997 as they tried to save 30 separatists convicted from the previous riot, including three who had received death sentences. Southern Xinjiang, as well as Yining in the western part of the region, has severe unemployment and other economic problems, and these areas appear to be hotbeds of such activities (Lai 2002, p447).

Xinjiang's economic development has heavily relied on the influx of migrants (primarily Han) from elsewhere in China, insomuch as historically it was a sparsely populated frontier region. At the time when the Chinese Communist Party seized the province in 1940, over 70 percent of the population was Uyghur and less than 7 percent were Han. In 1950s and 1960s, the central government systematically and continuously organized massive migration into Xinjiang for military security and economic development reasons through the Xinjiang Production and Construction Corps (Becquelin 2000; McMillen 1981). This policy led to the rapid increase of the Han Chinese in the region, from less than 7 percent to over 40 percent by 1978 (Xinjiang Uygur Autonomous Region Statistical Bureau 2006). As shown in Figure 3, the proportion of Han Chinese slightly declined in the 1980s because many youth from other provinces sent there during the Cultural Revolution returned home and also the enforcement of one-child policy was implemented more stringently among Han Chinese than among ethnic minorities. As a result, from 1980 to 1985, the population of the Uyghur increased by 530,000 while the Han increased by only 39,000 (China Compendium of Statistics, 1949-2004). During the1990s the western development strategies launched by the central government, especially those targeted at petroleum extraction, cotton production, and mining created many new economic opportunities in the region, thereby triggering a new wave of internal migration into Xinjiang (Information Office of the State Council 2003b; Liang and Ma 2004). As is shown in Figure 3, from 1995 to 2004 the Uyghur population of Xinjiang increased by 1,180,000 whereas the Han population increased by 1,480,000 (National Bureau of Statistics 2005; Howell and Fan 2011).

The discussion of migration in China must also consider the impact of the household registration (*hukou*) system (Chan and Zhang 1999; Liu 2005; Solinger 1999; Wang 2004; Wu and Treiman 2004, 2007). Since its installation in 1955, the *hukou* registration has been an important administrative means of controlling migration, distributing resources, and in effect determining the life chances of the Chinese people under state socialism (Wu and Treiman 2007). The economic reform has weakened the *hukou* system to some extent, but even today it continues to be the main criterion in allocating government subsidies, welfare, and employment opportunities (Wu 2012). Those with rural *hukou* status, regardless of their occupations, are classified as "peasant-workers" (*ming gong*), a synonym of "underclass", who are entitled to few labor rights and benefits and subject to severe discriminations (Solinger 1999). The disparities between rural migrants and local urban workers have been commonly observed in China. Previous empirical analyses suggested that inequality between local and migrant workers in urban China are mainly due to segregation among different sectors and occupations, to which *hukou* status has created an entry barrier. In more marketized sectors, migrant workers earnings disadvantages compared to local residents have been shown to be smaller or even non-existent (e.g., Zhang and Wu 2012).

The influx of Han migrants from other provinces further complicates ethnic relationships in Xinjiang. Because migrants and ethnic minorities are both disadvantaged compared to local Han Chinese, they tend to compete against each other, escalating inter-ethnic tensions and conflicts. While the Chinese government has never been sympathetic towards migrants (Solinger 1999), for a long time the authorities were quite sensitive to the problems of local minorities in Xinjiang caused by the inflow of Han. A series of socioeconomic policies have been implemented to favor minorities with respect to family planning, college admission, job recruitment and promotions, and representation in legislative and other government bodies (Sautman 1998). A policy known as the Xinjiang Six Principles set a 60 percent quota for Uyghur in college admission, job recruitment and army enlistment (valued in China as an important avenue for social mobility). Law enforcement for many crimes is also more lenient towards Uyghur in Xinjiang (He 2009).

The local government effectively implemented these policies in mid 1980s but since the deepening of the economic reform it started to shift priorities from promoting ethnic equality to pursuing economic growth by relaxing restrictions in recruiting and rewarding employees for

profit-driven enterprises. These policy changes as well as the relaxation of restrictions on internal migration placed Uyghur into an even more disadvantaged position than before in that they have to compete with both local Han Chinese who are often privileged in *hukou* status and educational attainment, and Han migrants who are often willing to work for lower wages. In our analysis below, we will provide a full picture of the inequalities among the three groups with respect to their occupational attainment and economic outcomes.

Market Reforms, Migration, and Ethnic Inequality: Research Hypotheses

As China progresses further towards economic marketization, the private sector, including self-employment, has experienced exponential growth since the 1990s. Private economic activity in China takes two forms: individual/household businesses (*geti gongshang hu* or *geti hu*) and private enterprises (*siying qiye*) (Gregory et. al. 2000). In the early 1980s, only individual/household businesses were granted legal status, and a cap of seven was set on the number of workers a *geti hu* could hire. Private enterprises (*siying qiye*) on a larger scale, not sanctioned until 1988, developed rapidly since 1992 after Deng Xiaoping called for further market-oriented reforms in his famous tour of southern China. Private ownership was fully legitimized in the late 1990s and has been playing an increasingly important role in China's economic growth and institutional transition. The contribution of private enterprises and self-employed *ge ti hu* to China's GDP increased from 4.1 percent in 1990 to 20.3 percent in 2005, and the share of urban employment in the private sector increased from 18.5 percent to 73.3 percent during the same period (National Bureau of Statistics 2009; Wu 2011). The development of the private sector in Xinjiang was much slower. Its share in the regional GDP increased from 3.2 percent to 6.8 percent, and its share of urban employment increased from 4.8 percent to 46.2 percent (Xinjiang Uygur Autonomous Region Statistical Bureau 2001).

Among those working outside the state and collective sectors, a notable proportion of them are indeed self-employed *geti hu*, who were on their own and fully exposed to market competition. Previous studies have shown that, while the self-employed were once the winners in the early reform period, they have been marginalized and no long enjoy economic advantages over those in the state sector (Wu and Xie 2003). In the late reform period, self-employment has become "a refuge from poverty" (Hanley 2000), a popular recourse for migrant workers from rural areas and those laid off from the urban state sector, who have difficulty finding formal

wage jobs (Wu 2006, 2010). About 26.8 percent of non-agricultural workers reported their sector as *geti hu* in the latest mini-census, among whom 30.7 percent were employees, 10.9 percent were employers, 51.8 percent were self-employed, and the rest were said they worked in family businesses.

Apart from those working as self-employed, the rest of those working outside the state and collective sectors were largely from profit-driven private firms. These firms put more emphasis on economic efficiency than social justice when they recruited employees. They hire workers at their own discretion without much government intervention, often based on workers' demographic characteristics, which are considered to be related to workers' job requirements and productivity potential. Uncertain about a candidate's ability, they may base employment decisions on visible features such as ethnicity or gender, resulting in labor market discrimination. Even when economic agents (consumers, workers, employers, etc...) are rational and non-prejudiced, "statistical discrimination" can exist and persist when stereotypes based on a group's average behavior are relied upon (Arrow 1974, 1998; Phelps 1972).

Notwithstanding the substantial growth of the private sector, "Xinjiang's economy remains among the most state-centered of all China's provinces" (Starr 2004, p 4). While the state sector is still supposed to implement affirmative action policies favoring ethnic minorities, it is no longer monolithic (Zang 2010). The post-1978 reforms have sought to convert state firms to more profit-oriented entities less dependent on administrative fiats (Wu 2002). This effort has further intensified since the mid-1990s as state firms have increasingly been allowed to adopt market practices in recruiting, rewarding, and dismissing workers (Wu 2010). Recent analyses show that, the most salient distinction among work units in terms of income and benefits is now between government/public institutions vs. the others, rather than between state vs. non-state sectors or public vs. private sectors (Wu and Guo 2008).[5] In the course of the market reform, state firms now behave more like private enterprises, whereas government agencies and public institutions continue their redistributive role to provide public goods and promote social justice (Zang 2010).

[5] All work units are typically classified into five categories: 1=government, 2=public institutions, 3=state-owned enterprise, 4=collective enterprises, 5=private enterprises and others. Here comparisons can be made between different parities, such as government/public institutions (1+2) vs. the others (3+4+5), state (1+2+3) vs. non-state sectors (4+5), or public (1+2+3+4) vs. private sectors (5).

Based on the data from the 2005 mini-census, Table 1 presents the gradation in four types of employment benefits among workers in different sectors: whether the worker had an employment contract, unemployment insurance, a basic pension, and a basic medical insurance. The pattern largely confirms the existence of such a redistributive/market continuum across the four sectors in China in general and in Xinjiang in particular.[6] Therefore, government/public institutions, public enterprises, private firms and self-employment now constitute a continuum that approximates the decline in the influence of the redistributive state and the increase of market forces in the labor market.

Given the lack of longitudinal data to measure ethnic inequality in China directly, especially in the context of the rising market forces and declining redistributive influence, we approximate sectoral difference to gauge the impact of market transition on the wellbeing of Chinese ethnic minorities as well as Han migrants. Because employment sector *per se* is also an important structural source of labor market inequality in China (Wu 2002; Xie and Wu 2008), inequality between ethnic groups may stem from two sources. The first is differential access to jobs in higher-paid sectors (between-sector inequality or a sector-segregation effect), and the second is individual variability within the same sector (within-sector inequality).

Previous research has shown substantial differences in job attainment in different sectors between Uyghur and Han Chinese in reform-era Xinjiang. Based on survey data collected in Urumchi, the capital of Xinjiang in 2005, Zang (2010) reported that, after controlling for other individual characteristics, Uyghur were less likely to be employed in state-owned firms than Han Chinese,[7] but they do not differ significantly in the likelihood of being employed in redistributive agencies (government/public institution). Hence, we expect a bimodal distribution of employment across different sectors alongside the declining state protection and rising market forces. We thus propose to test the following hypothesis:

H1: Compared to Han locals, Uyghur are more likely to work in the sector with the highest degree of redistribution within the formal employment sector, but they are also more likely to become self-employed than to be engaged in the formal employment sector.

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[6] The only exception is those working in the government/public institution, many of whom are civil servants with a different package of benefits. Employment contracts and unemployment insurance are not applicable to them, and they still enjoy a socialist pension plan different from the pension insurance system now widely adopted in other sectors (Chow and Xu 2001).

[7] Non-state sectors include collective enterprises, private enterprises and family businesses (Zang 2010, p354).

To understand Uyghur's access to jobs in different sectors, it is necessary to bring attention to internal migrants, who lack a local *hukou* (from other provinces) and are also disadvantaged in labor markets. Previous analyses have suggested that inequality between local workers and migrant workers in urban China is mainly due to segregation among different sectors and occupations, and that *hukou* status is used as an institutional barrier to entry. Without a local urban *hukou*, migrants are denied access to decent jobs in the public sector under most circumstances. In a more marketized sector, migrant workers' earnings disadvantage compared to local residents tends to be smaller or even non-existent (Zhang and Wu 2012). This national pattern is also likely to hold true in Xinjiang. On the other hand, an early analysis of occupational attainment in Xinjiang by Hannum and Xie (1998) showed that the increasing ethnic gap in job attainment from 1982 to 1990 could be explained mainly by educational disparities between Han Chinese and ethnic minorities. Net of education, ethnic differences in obtaining high-status professional and management jobs seemed to be negligible, which may have resulted from the recruitment policies favoring ethnic minorities in the state sector, where most high-status jobs were located as of 1990. We therefore propose the following hypothesis:

H2: Earnings inequalities between Uyghur and Han locals are mainly derived from within-sector differences, whereas disparities between Han migrants and Han locals are mainly due to sector segregation.

Our ultimate goal is to examine the impact of market reform on ethnic earnings inequality in Xinjiang. As discussed earlier, we use four sectors (government/public institutions, public enterprises, private enterprises, and self-employment) to form a continuum of decreasing state protection of ethnic minorities. For Uyghur, the decline in state protection may have enlarged their socioeconomic disadvantages compared to the Han. For Han migrants, discrimination against those without a local *hukou* may have diminished with the introduction of market forces (Wu and Treiman 2004, 2007), as employers have become more concerned about the skills and productivity of their workers than about residence status in face of the market competition (Zhang and Wu 2010). Therefore, we expect that ethnic earnings inequality varies by sector and propose our last hypothesis:

H3: Earnings inequality between Uyghur and Han locals tends to be larger in sectors where state protection is weaker, whereas earnings inequality between Han migrants and Han locals tends to be smaller in sectors where state protection is weaker and market forces predominate.

In the following analyses, we will examine sector segregation and earnings differentials among Uyghur, Han locals, and Han migrants in different sectors. Such sectoral comparisons can shed light on the changing stratification dynamics in China.

Data, Variables and Methods

We extract a sample from the Xinjiang population mini-census data in 2005 and restrict the analysis to ethnic Han Chinese and Uyghur aged 16 to 59. Unlike survey data typically limited to certain areas of Xinjiang (e.g., Zang 2010), this is a region-wide representative sample with a large sample size (N=22,581). Compared with other population census data (e.g. Hannum and Xie 1998), the 2005 mini-census for the first time collected information on earnings, work unit sector based on ownership and employment status (employer, employee or self-employed).

Since the focus of this paper is on labor market stratification between the Han Chinese and Uyghur, we exclude other ethnic groups and divide Han Chinese respondents into local and migrant subsamples. Han locals refer to those who reported their nationality as "Han" and were registered within Xinjiang, whereas Han migrants refer to those registered in other provinces, including both rural and urban *hukou* holders. Because 99 percent of China's Uyghur reside in Xinjiang, the sample did not include a Uyghur migrant category and we also exclude a few cases (less than 1 percent) of migrant people with any minority identity. [8]

The key dependent variables are sector attainment and monthly earnings. We code work unit in the nonagricultural sector sectors into 4 categories: government/public institution, public enterprises, private enterprises, and the self-employed, in addition to the agricultural sector. Most of public enterprises were state-owned firms, with a small proportion of collective enterprises. As mentioned earlier, these sectors form a hierarchy representing the extent of influence of state policy. Other independent variables include education, gender, age, and *hukou* status. Education is measured in 4 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). Age is a continuous variable, and to capture a curvilinear relationship between age and earnings and sector attainment, a squared term of age is included. To control for regional variations in development, we also collect county-level GDP per capita and include them in the models to predict earnings.

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[8] We assume that Uyghur identity is fixed, although individual Uyghur may differ in their social experience and identity as a minority group with reference to the Han Chinese.

Table 2 presents descriptive statistics for the three groups for the full sample and also for agricultural and non-agricultural subsamples separately. The full sample statistics in the upper panel appears to show a socioeconomic gradient among Han locals, Han migrants and Uyghur. In general, Han locals and migrants tended to be older, better educated, and to earn more than Uyghur. Han migrants indeed enjoyed a slight advantage in monthly earnings over Han locals.

In the non-agricultural sector, as has been observed elsewhere in China, Han migrants reported earnings higher than the Uyghur locals on average, though they were the least educated among the three groups: 11.8 percent of them graduated from college, in contrast to 33.4 percent of the Han locals and 26.9 percent of the Uyghur. This is probably due to the fact that most migrants were from rural areas: only 28.3 percent of them held urban *hukou* status.

Table 2 further shows that Han locals tended to work in the state sector (27.9 percent in government/public institution and 34.8 percent in public enterprises), whereas most migrants worked in the private sector (21.8 percent in private enterprises and 50.9 percent were self-employed), because, even today, most jobs in the public sector are still tied to *hukou* registration status with long-distance migrants from other provinces excluded (Wu 2009). Interestingly, the Uyghur were roughly equally divided between the public and private sectors. The table shows that 37.4 percent claimed to be employed in government/public institutions and 45.6 percent to be self-employed, the two ends of proposed sectoral hierarchy.

In the following analysis, we first examine the ethnic earnings disparities in agricultural and non-agricultural sectors and then focus the analysis on sectoral attainment and ethnic earnings gap across different sectors among the non-agricultural labor forces. We employ linear regression models with fixed effects and multinomial logit models. To demonstrate the contribution of sector segregation and within-sector differentials to overall earnings inequality, we apply Brown decomposition methods (Brown et al. 1980; Liu et al 2000, 2004; Sung et al. 2001). The decomposition takes the form:

$$\overline{\ln Y}^{H} - \overline{\ln Y}^{U} = \underbrace{\sum_{j=1}^{J} P_j^U \hat{\beta}_j^H \left(\bar{X}_j^H - \bar{X}_j^U\right)}_{(I)} + \underbrace{\sum_{j=1}^{J} P_j^U \bar{X}_j^U \left(\hat{\beta}_j^H - \hat{\beta}_j^U\right)}_{(II)}$$

$$+ \underbrace{\sum_{j=1}^{J} \overline{\ln Y}_j^H \left(P_j^H - \hat{P}_j^U\right)}_{(III)} + \underbrace{\sum_{j=1}^{J} \overline{\ln Y}_j^H \left(\hat{P}_j^U - P_j^U\right)}_{(IV)}$$

where a bar over a variables denotes the mean value, and the superscripts *H* and *U* refer to Han locals and Uyghur, respectively. Here *Y* refers to workers' earnings. The term p_j^U (or p_j^H) is the observed proportion of Uyghur (or Han locals) in sector *j*, and the term $\hat{p}_j^U$ represents the hypothetical proportion of Uyghur who would be in sector *j* if Uyghur were distributed by sector identically with Han locals, i.e., if there were no sector segregation. Part I of the model captures explained differences in within-sector income, whereas Part II is the unexplained within-sector income differentials. Part III and Part IV represent, respectively, the explained and unexplained portions in terms of sector segregation.

To estimate the term $\hat{p}_j^U$, we introduced a multinomial logistic regression model to estimate the hypothetical sector structure for Uyghur when segregation does not exist. The probability of the *i*th individual entering sector *j* may be defined as

$$P_{ij} = \Pr(y_i = \text{sector}_j) = \exp(X_i\beta_j) \Big/ \sum_{j=1}^{J} \exp(X_i\beta_j)$$

where X_i is a vector of the exogenous variables commonly used in earnings determination, such as gender, age, education and ethnicity. Estimates of the parameters β of this model were obtained by using Han observations, and the Uyghur's characteristics are then substituted into the estimated equations, producing for each Uyghur a predicted probability of belonging to each sector. These predicted probabilities of being in each sector are summed over observations to obtain the predicted sector distribution of Uyghur, $\hat{p}_j^U$. The same procedures are applied to group comparisons between Han locals and migrants.

Empirical Results

Table 3 presents the estimated coefficients from OLS regressions of logged earnings on selected variables. With the full sample (models 1 and 1a), after controlling for other factors, Han migrants surprisingly earned higher income than Han locals, whereas Uyghur earned much less than Han locals. These disparities might reflect rural-urban inequality as elsewhere in China, since native Uyghur are more likely to be engaged in the agricultural sector than local Han. Indeed, according to Table 2, more than 71 percent of Uyghur (7571/10616) but only 35 percent of Han locals (3306/9580) and even fewer Han migrants (248/2385) in Xinjiang were engaged in the less lucrative agricultural sector.

We then further divide the sample into agricultural and non-agricultural parts. Results in Models 2 and 3 suggest that Uyghur were even more disadvantaged in the agricultural sector than in the non-agricultural sector. Other things being equal, Uyghur earned only 59 percent ($e^{-0.520}$) of Han locals on average: 49.2 percent ($e^{-0.709}$) in the agricultural sector and 77.6 percent ($e^{-0.254}$) in the non-agricultural sector. On the other hand, Han migrants seem to enjoy a greater advantage over Han locals in the non-agricultural sector than in the agricultural sectors, with 16.5 percent ($e^{0.153}$-1) and 28.9 percent ($e^{0.254}$-1) higher earnings, respectively. Even after including the county's economic development level (measured by GDP per capita) in the model, a large earnings disparity among the three groups persists, with only a slight change in the magnitude.

Table 4 further disaggregates the four types of the work unit outside of the agricultural sector: government/public institution, public enterprise, private enterprise, and self-employment. The table presents the coefficients of the multinomial logit models on sector attainment among the three groups, controlling for the effects of *hukou* status, gender, age, and education levels.

As expected, compared to Han locals, Han migrants were much less likely to work in government/public institutions and more likely to work in private enterprises than in public enterprises. However, unlike what is shown in Table 2, after taking into account the effect of education, Han migrants were less likely to be self-employed than to work in a public enterprise. To give an example, net of the other factors, migrants' odds of working in government/public institution or being self-employed (as opposed to working in public enterprises) were only 35.6 percent ($e^{-1.032}$) and 83.6 percent ($e^{-0.179}$) of the odds for Han locals, but their odds of working in private enterprises were 41.3 percent ($e^{0.346}$-1) higher than the odds for their local Han counterparts. All these differences are statistically significant ($p<.001$). *Hukou* is another basis of sector exclusion in Chinese urban labor markets. Compared to those urban *hukou* holders, workers with rural *hukou* are much less likely to work in government/public institutions, but are more likely to work in private enterprises or be self-employed than to work in public enterprises. The net odds of people with rural *hukou* working in government/public institutions are 15 percent less ($e^{-0.163}$-1), but the odds of working in private enterprises or being self-employed are, respectively, 20 percent ($e^{0.184}$-1) and 48 percent ($e^{0.392}$-1) greater than the odds of people with urban *hukou*, net of other factors. The effect of rural *hukou* status provides an even clearer story on how socialist institutions discriminated against those without an urban *hukou* in access to employment opportunities provided by the state.

Nevertheless, as has been discussed, ethnic minorities were in some ways under the protection of the socialist state. The multivariate results in Table 4 show that Uyghur were more likely to work in government/public institutions or to be self-employed. Their odds of working in government/public institutions (as opposed to public enterprises) were 4.3 times ($e^{1.457}$) the odds for Han locals, controlling for education and other factors. The high representation of Uyghur in government/public institutions could be attributed to the government's preferential policies still at work in the sector that the state directly controls. The majority of Uyghur were excluded from access to employment opportunities in public and private enterprises (with no significant difference in likelihood between them), and self-employment apparently was a refugee for those who could not find wage jobs and faced competition from Han Chinese. Other things being equal, a Uyghur's odds of being self-employed were twice ($e^{0.693}$) those of a Han local. The distribution patterns are plotted in Figure 4, which provides supports to Hypothesis 1.

Such distinctive patterns of sector segregation have important implications for understanding ethnic earnings inequality in Xinjiang. To differentiate the effect of sector segregation from the effect of within-sector discrimination, we first substitute the characteristics for Uyghur into the estimated equation for Han locals in multinomial logit model and obtain hypothetical probabilities of being in each sector for each Uyghur. We then decompose the disparity between Han locals and Uyghur into parts of observed difference and hypothetical difference to show how much of the earnings inequality originates from sector segregation and how much is due to the within-sector difference. Similar methods were applied to decompose the mean difference in earnings between Han migrants and locals.

Results presented in Table 5 show that, earnings disparities between Uyghur and Han locals were mainly from within-sector differences rather than from sector segregation. The within-sector difference can explain 103.95 percent of the total income differential, which suggests that, overall, sector segregation did not contribute much to the earnings inequality between Uyghur and Han locals. Moreover, the Uyghur's sector distribution offset part of their earnings disadvantages. In contrast, the earnings difference between Han migrants and locals was less than a quarter 1/4 (≈0.079/0.335) of the difference between Uyghur and Han locals. The total earnings differentials were largely due to sector segregations since Han locals were engaged in sectors with higher average earnings, that is, government/public institutions and state-owned enterprises. Despite the overall disadvantages of Han migrants, the -8.69 percent suggests that

within sectors, Han migrants are paid more than Han locals, though they may have received fewer fringe benefits. The negative unexplained part of the within-sector differentials, -116.71 percent, indicates that the higher earnings of Han migrants resulted from some unobserved characteristics and cannot be attributed to the variables included in the models. To conclude, the results from these decomposition analyses lend support to Hypothesis 2, i.e., earnings inequalities between Uyghur and Han locals are mainly derived from within-sector differences, whereas disparities between Han migrants and Han locals are mainly due to sector segregation..

Finally, we examine in Table 6 how Uyghur-Han earnings gaps vary across different employment sectors. We run regression models on the logarithm of earnings separately for each sector, with ethnicity, *hukou* status, gender, age, age^2, education, controlling for differences among the counties, occupations (two-digit code) and industries. As predicted by Hypothesis 3, the Uyghur-Han earnings disparity was larger within sectors that saw declining state protections of minorities. Other things being equal, Uyghur earn 3.5 percent ($e^{-.036}$-1) less in government/public institutions, 12 percent ($e^{-0.128}$-1) less in public enterprises, 28.7 percent less ($e^{-0.338}$-1) in private enterprises, and 34.2 percent less ($e^{-0.419}$-1) in self-employment than Han locals. Except for the insignificant coefficient in the equation for government/public institutions, the coefficients in the equations for all other three sectors are highly significant ($p<0.001$). The results of Hausman tests further confirmed that the differences among coefficients across equations (sectors) are highly significant ($p<0.001$).

On the other hand, Han migrants enjoy a net earnings advantage of 10.4 percent ($e^{0.099}$-1) in public enterprises, 17.1 percent ($e^{0.158}$-1) in private enterprises, and 10.3 percent ($e^{0.098}$-1) in self-employment compared to the Han locals. The evidence may reflect the selectivity of long-distance Han migrants moving to Xinjiang for economic reasons. Interestingly, unlike what have been reported in other studies (e.g., Liu 2005; Meng and Zhang 2001), wage discrimination against people with rural *hukou* did not exist in Xinjiang in 2005 except in the government/public institution sector, largely due to the occupational segregation (also see Zhang and Wu 2012).

Figure 5 plots the earnings of Han migrants and Uyghur relative to Han locals (equal to 1) across four sectors. Confirming Hypothesis 3, with the weakening of government intervention in the labor markets, ethnic inequality tends to be larger. Ethnic egalitarianism seems to have remained effective only in government/public institutions after decades of economic reforms.

Conclusions and Discussions

In this paper we examined labor market inequality for Han and Uyghur in Xinjiang based on the analysis of a sample of micro-data from the population mini-census in 2005. We paid particular attention to ethnic and *hukou*-based disparities among Han locals, Han migrants, and Uyghur in terms of their differential access to employment sectors and earnings within each sector in China's labor markets.

Our analyses show that, ethnic earnings gaps in Xinjiang were larger in the agricultural sector, where most Uyghur work, than in the non-agricultural sector. Within the non-agricultural sector, Uyghur were more likely to work in government/public institutions than Han Chinese, and their earnings were equal to Han earnings in that sector, controlling for demographic characteristics, suggesting the effectiveness of the Chinese government's policies to promote ethnic equality. But ethnic inequality was greater in the economic sectors where the state's influence had declined and the market forces were in place. Specifically, Han locals were more likely to work in public enterprises and Han migrants were more likely to enter private enterprises than were Uyghur. Therefore Uyghur not able to receive preferential opportunities in government/public institutions were squeezed into the self-employment sector.

In all sectors except government and public institutions, the Uyghur face fierce competition from Han Chinese and are largely disadvantaged in earnings. In public enterprises, the Uyghur are competing with Han locals, whereas in the booming private enterprises, their main rivals are Han migrants from other provinces. Even in the popular destination of self-employment, they seem to have fared worse economically than Han locals. It would not be surprising, therefore, if Uyghur in Xinjiang felt frustrated that the increasing economic opportunities were taken by Han Chinese (Gilley 2001; Jiang 2009).

To shed light on how the redistributive state and the market forces simultaneously shape ethnic inequality, we examined the disparities between Han migrants and locals based on *hukou* distinction as an additional contrast. Despite the great ease in spatial migration in the reform era, *hukou* continues to act as the main criterion for social exclusion of rural *de jure* residents, who have moved into cities but are denied access to welfare benefits and opportunities enjoyed by local urban permanent residents. Such "institutional discrimination" against rural migrants without local *hukou* in access to certain types of jobs and entitlement to fringe benefits seems to be more prominent in sectors with stronger redistributive influences. Marketization presumably favors migrant workers, as private employers pay primarily for workers' skills, efforts, and productivity. The commonly observed inequality between Han migrants and locals is mainly due

to job sector segregation (for more details, see Zhang and Wu 2012). We conclude that the pattern of ethnic stratification in Xinjiang is a mixed result of the rising market forces that tend to enlarge ethnic inequality and the government's persisting effort in promoting ethnic equality.

The socialist state has long played a visible and direct role in promoting ethnic egalitarianism, but after three decades of market reform, state preferential policies seem to remain effective only in government/public institutions. Ethnic earnings inequality tends to be larger in economic sectors more exposed to market competition. There, discrimination against Uyghur may be due to other individual characteristics, such as Chinese language skills and weak social networks among Uyghur (Zang 2010), or it may stem from Han employers' prejudice about their work ethic, culture, or religion (Hasmath, Ho and Liu 2010). For example, employees in the public sector (government, public institution, or public enterprise) are not allowed to display their religious markers, which may discourage Uyghur from entering this sector. Such nuances could not be assessed with the data analyzed here. Future empirical research might address more directly the factors driving "market discrimination" against ethnic minorities.

While our analyses focus on the earning inequalities existing in the labor market of Xinjiang in Northwest China, they suggest some mechanisms that may also apply to elsewhere in China, and perhaps more generally, contribute to the literature on economic development, ethnic relations, and migration. The findings have general implications for understanding the stratification dynamics in the course of a transition from a state-planned to market economy. 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) tended to lose out and face more disadvantages in the labor markets. Those who used to be discriminated against by the socialist state (e.g., rural migrants) tended to gain more opportunities from economic liberalizations.[9] Hence, the findings also shed new lights on the necessity of the adjustment of affirmative-action type of government policies or social policy in general to tackle the intertwining relationship between ethnicity, migration and nationalism in the context of rapid social transformation.

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[9] The difference in earnings inequality by gender across different sectors in Table 6, albeit not the focus of this paper, provides further evidence to support this claim. The gender gap is smallest within government/public institutions, reflecting a legacy of socialism, but increases in the sectors that are more marketized. Maoist China promoted women's status and gender equality, but the institutional transition to a market economy since 1978 has granted enterprises more autonomy in hiring and rewarding workers, therefore putting women in even more disadvantaged positions (also see He and Wu 2012).

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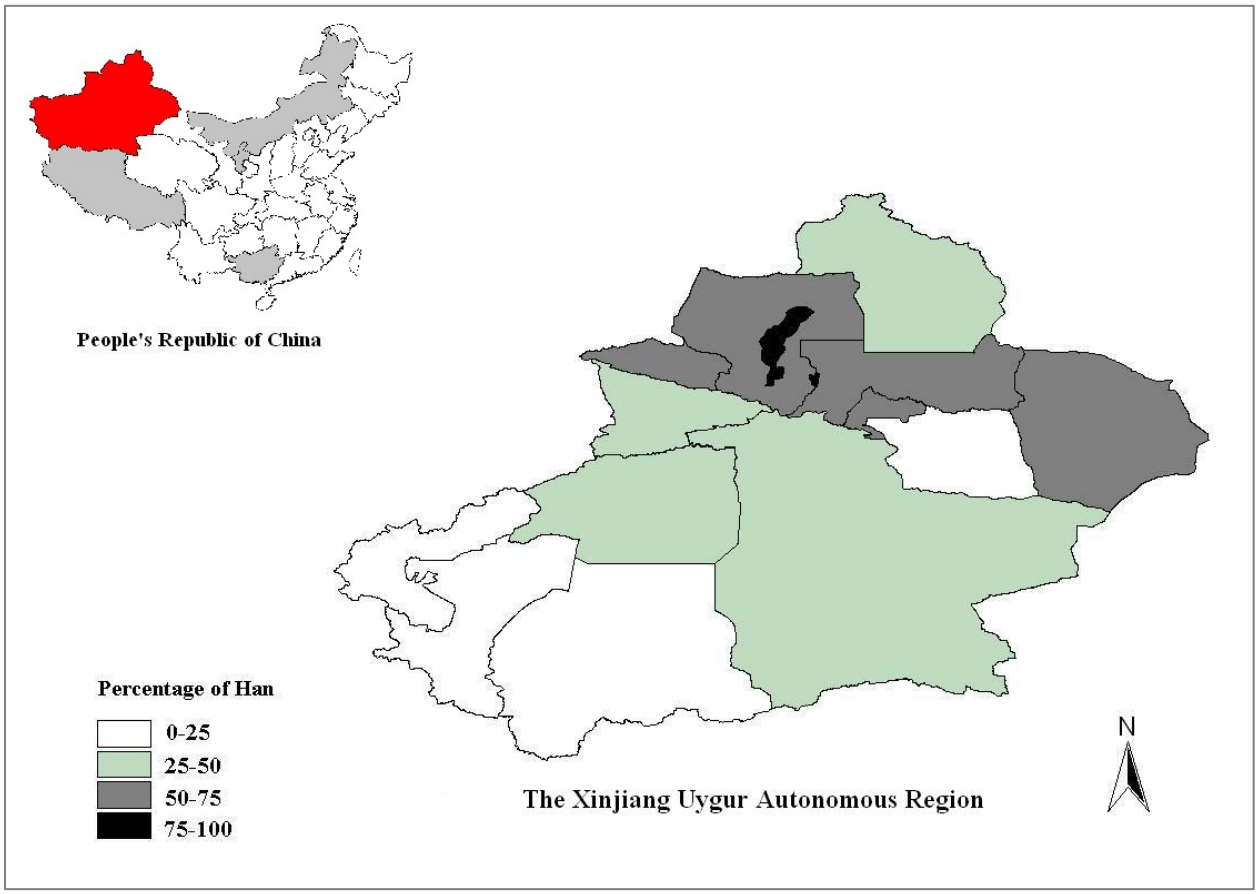
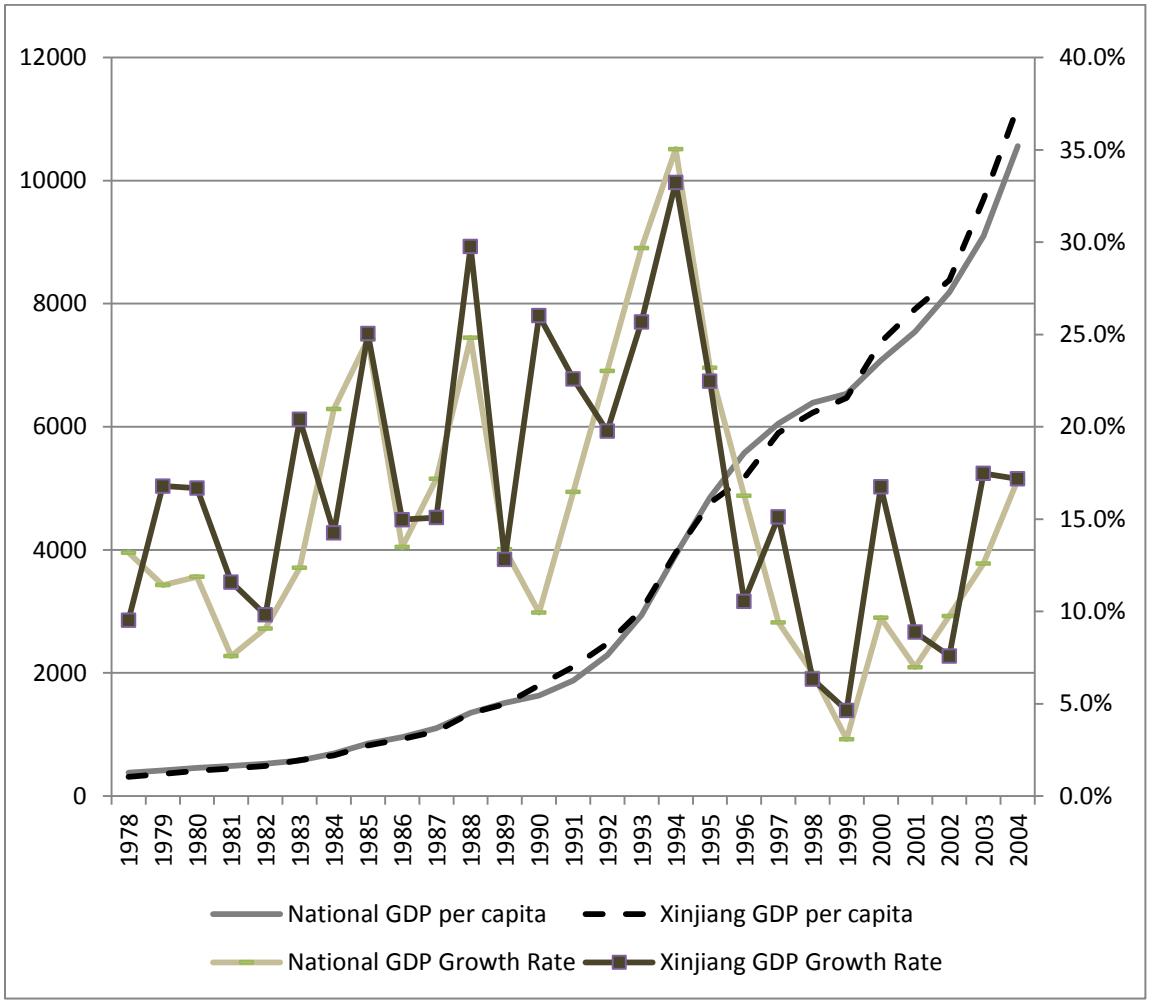
Figure 1. The Percentage of Han Chinese Population by Prefecture, Xinjiang, 2005



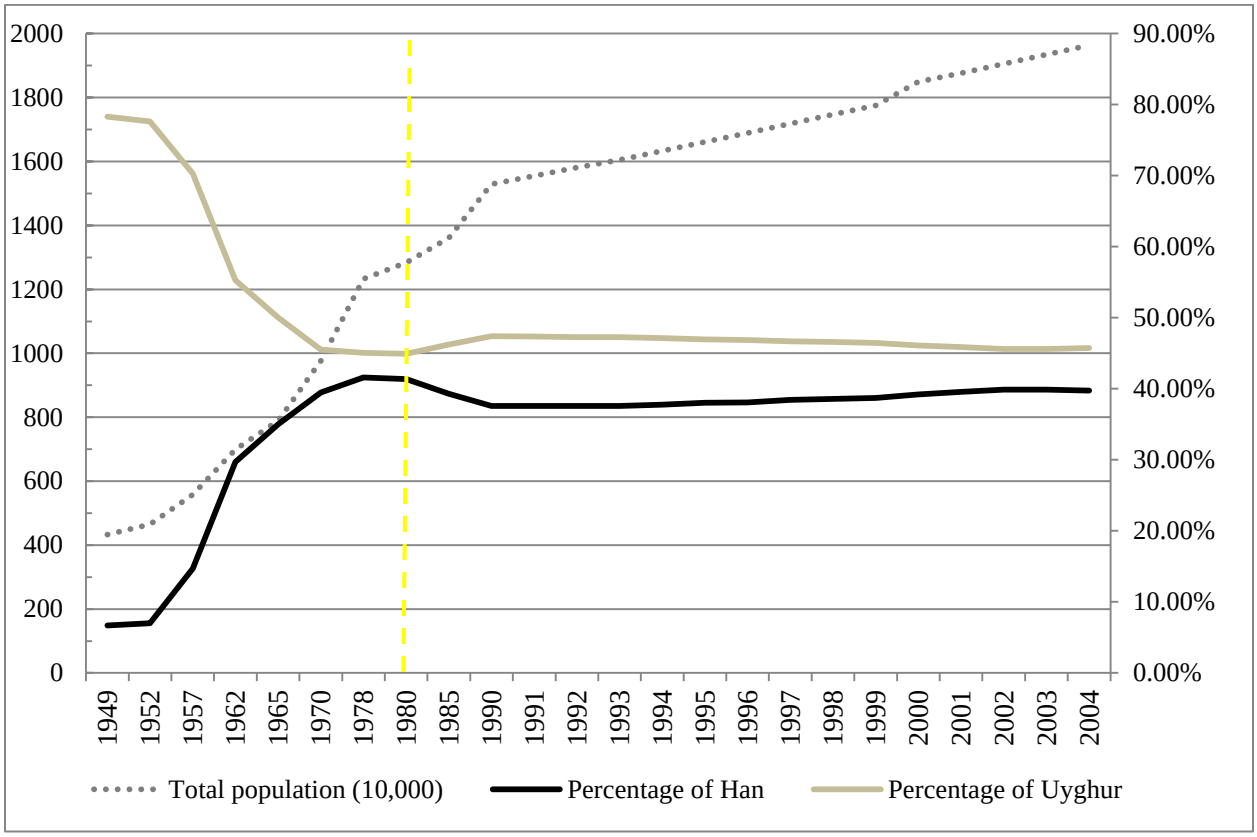
Data source: Xinjiang Statistical Yearbook

Figure 2. Annual Economic Growth, 1978-2004



Data source: China Statistical Year Book; Xinjiang Statistical Yearbook

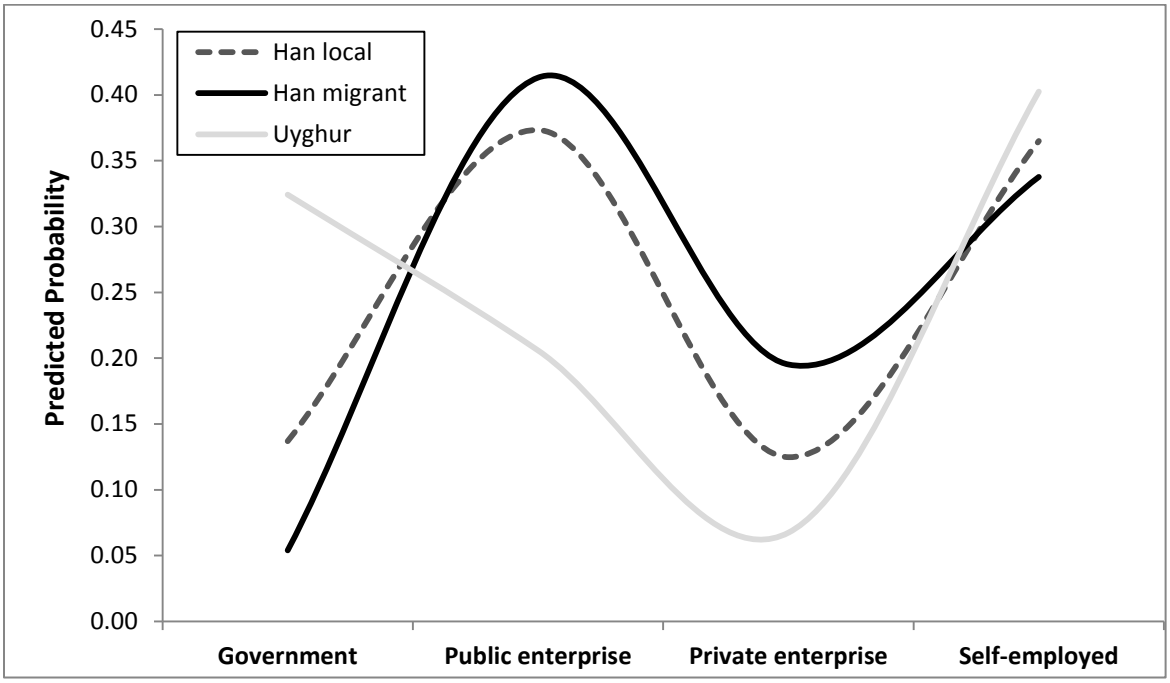
Figure 3. Changes in Ethnic Composition of the Population, 1949-2004



Data source: China Statistical Year Book; Xinjiang Statistical Yearbook; China Population Statistical Year Book; China Compendium of Statistics, 1949-1985

* The yellow dash line denotes 1982 when the central government carried out a family planning program directed primarily at Han people.

Figure 4. Predicted Probability of Entry into Non-agricultural Sectors, Xingjiang, 2005



* The predicted probability is estimated based on the sample mean of the urban population.

Figure 5. Relative Earnings of Uyghur and Han Migrants Relative to Han Locals among Non-agricultural Workers in Xinjiang, 2005

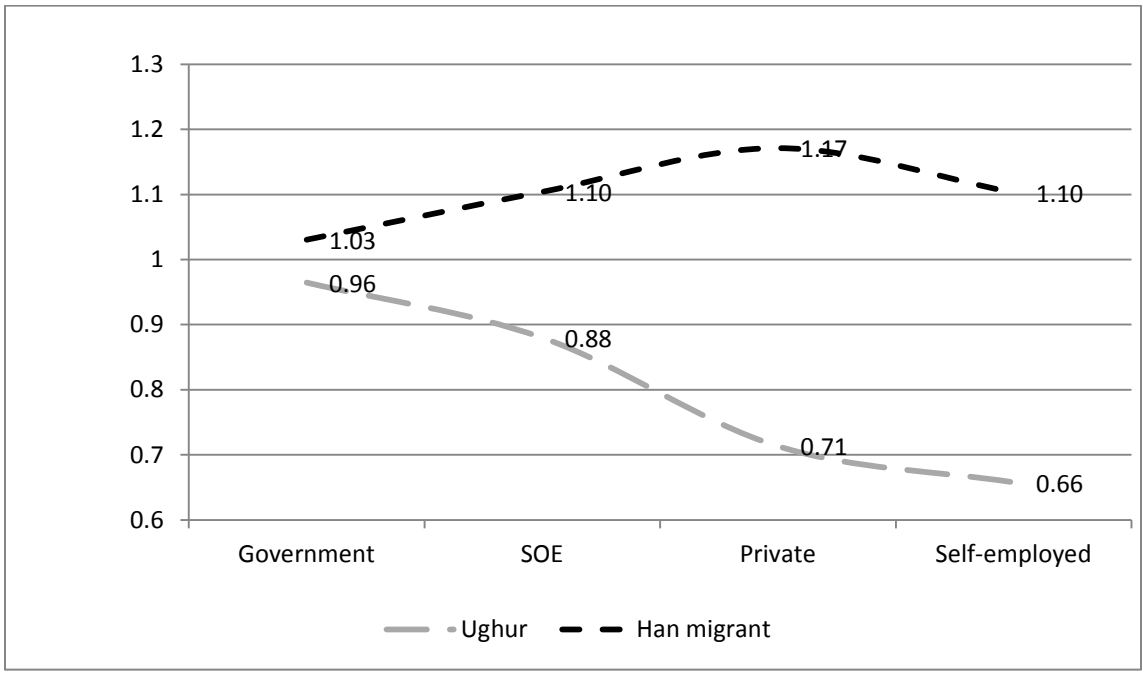


Table 1. Employment Benefits in Different Sectors, China (Xinjiang), 2005

	Employment contract	Unemployment insurance	Basic old-age insurance	Basic Medical Insurance
Government/public institution	59.3 (57.5)	43.1 (51.9)	61.8 (46.1)	80.4 (95.0)
Public Enterprise	73.0 (76.4)	58.8 (72.6)	74.0 (78.2)	72.4 (77.1)
Private Enterprise	32.9 (28.1)	12.9 (12.5)	23.0 (21.6)	34.4 (29.1)
Self-employment	8.9 (6.1)	3.2 (5.9)	10.8 (17.1)	22.6 (24.5)

Data Source: China population mini-census, 2005. Figures refer to national percentages while those in the parentheses refer to the percentages in Xinjiang.

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Table 2. Descriptive Statistics Aged 16-59, Xinjiang, 2005

Full Sample	Han locals	Han migrants	Uyghur
Monthly income	853.4	896.4	380.0
	(616.4)	(623.5)	(395.5)
Age	37.8	34.3	33.3
	(8.4)	(8.5)	(11.1)
Male (%)	56.0	61.1	57.6
Education			
primary and below	14.5	30.3	44.5
junior high school	41.8	44.0	39.5
senior high school	21.6	15.1	7.8
college or above	22.1	10.6	8.2
Rural *hukou* (%)	34.7	74.2	82.6
N	9580	2385	10616
Agricultural Sample			
Mean income	543.8	603.3	246.2
	(477.5)	(468.6)	(229.6)
Mean age	39.2	35.8	33.4
	(9.1)	(8.6)	(11.5)
Male (%)	53.5	51.2	55.1
Education (%)			
primary and below	29.5	45.2	52.7
junior high school	60.4	48.0	42.3
senior high school	9.3	6.9	4.3
college or above	0.8	0.0	0.7
Rural *hukou* (%)	73.4	95.6	97.8
N	3306	248	7571
Non-agricultural Sample			
Monthly income	1016.6	930.4	712.5
	(618.9)	(630.3)	(509.1)
Age	37.1	34.1	33.2
	(7.9)	(8.5)	(9.8)
Male (%)	57.3	62.3	63.8
Education			
Primary and below	6.6	28.6	24.2
junior high school	32.0	43.5	32.4
senior high school	28.0	16.1	16.5
college or above	33.4	11.8	26.9
Rural *hukou* (%)	14.3	71.7	44.7
Sector distribution			
Government/institutions	27.9	6.7	37.4
Public enterprises	34.8	20.7	11.1
private enterprises	12.4	21.8	5.9
self-employed	24.9	50.9	45.6
N	5,310	1,683	2,558

Data source: 0.5% sample of 2005 mini-census; Figures in parentheses are standard deviations.

People who answered their work type as “Other sectors” (3.2%) were incorporated to private enterprises. Those who answered as “Others” (7.4%) were treated as self-employed.

Table 3. OLS Regression of Logarithm of Income on Selected Variables, Xinjiang, China, 2005

	Full sample		Agricultural Sample		Non-agricultural Sample	
Ethnic (Han local [omitted])	Model 1	Model 1a	Model 2	Model 2a	Model 3	Model 3a
Han migrants	0.388***	0.368***	0.153***	0.148***	0.254***	0.251***
	(0.014)	(0.017)	(0.038)	(0.037)	(0.016)	(0.019)
Uyghur	-0.520***	-0.482***	-0.709***	-0.669***	-0.254***	-0.202***
	(0.010)	(0.011)	(0.014)	(0.013)	(0.013)	(0.015)
Male	0.198***	0.192***	0.146***	0.146***	0.200***	0.190***
	(0.008)	(0.008)	(0.011)	(0.010)	(0.011)	(0.012)
Age	0.047***	0.045***	0.034***	0.034***	0.055***	0.053***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)
Age^2*100	-0.055***	-0.053***	-0.041***	-0.041***	-0.063***	-0.059***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.006)
Education (primary or below [omitted])						
junior high school	0.119***	0.113***	0.017	0.022	0.211***	0.206***
	(0.010)	(0.011)	(0.013)	(0.012)	(0.017)	(0.018)
senior high school	0.415***	0.387***	0.089***	0.084***	0.499***	0.487***
	(0.015)	(0.016)	(0.025)	(0.023)	(0.019)	(0.021)
college or above	0.813***	0.854***	0.266***	0.228***	0.818***	0.851***
	(0.016)	(0.017)	(0.066)	(0.062)	(0.019)	(0.022)
Rural *hukou*	-0.403***	-0.355***	-0.157***	-0.134***	-0.170***	-0.123**
	(0.011)	(0.012)	(0.021)	(0.019)	(0.014)	(0.016)
County-level GDP per capita (ten thousand yuan)	--	0.139***	--	0.202***	--	0.090***
		(0.006)		(0.008)		(0.009)
Constant	5.289***	5.143***	5.449***	5.247***	5.034***	4.907***
	(0.051)	(0.053)	(0.067)	(0.063)	(0.074)	(0.082)
N	22,548	19,744	11,109	10,938	11,438	8,805
R-squared	0.530	0.521	0.315	0.382	0.350	0.350

Data source: 0.5% sample of 2005 population mini-census.

Figures in parentheses are standard errors;

*p<0.05; **p<0.01; ***p<0.001

Table 4. Multinomial Logit Models Predicting Employment Sector Attainment in Xinjiang, Non-agricultural Sample 2005

	Base category =Public Enterprise		
	Government/Institution	Private Enterprise	Self-employed
Ethnicity (Han locals [omitted])			
Han migrants	-1.032***	0.346***	-0.179***
	(0.080)	(0.068)	(0.052)
Uyghur	1.457***	-0.020	0.693***
	(0.063)	(0.080)	(0.052)
Rural *hukou*	-0.163**	0.184***	0.392***
	(0.056)	(0.052)	(0.037)
Male	-0.127***	-0.016	-0.023
	(0.031)	(0.040)	(0.029)
Age	-0.191***	-0.158***	-0.104***
	(0.028)	(0.031)	(0.023)
Age^2*100	0.289***	0.172***	0.101**
	(0.037)	(0.042)	(0.031)
Education (primary or below [omitted])			
junior high school	-0.512***	0.080	0.502***
	(0.075)	(0.062)	(0.046)
senior high school	0.437***	0.066	0.131*
	(0.070)	(0.068)	(0.052)
college or above	1.899***	-0.058	-1.050***
	(0.068)	(0.077)	(0.072)
Constant	1.817***	2.268***	2.369***
	(0.503)	(0.542)	(0.416)
Likelihood Ratio		4283.49	
N		9456	

Data source: 0.5% sample of 2005 population mini-census, Xinjiang.

Figures in parentheses are standard errors;

*p<0.5; **p<0.01; ***p<0.001

Table 5. Decomposition of Ethnic Income Differentials, 2005

	Local Han* vs. Uyghur†		Local Han* vs. Han Migrants	
	Difference	%	Difference	%
Total income differential	0.335	100.00	0.079	100.00
Within-sector	0.348	103.95	-0.007	-8.69
Explained (I)	0.058	17.24	0.085	108.02
Unexplained (II)	0.290	86.71	-0.092	-116.71
Between-sector	-0.013	-3.95	0.086	108.69
Explained (III)	0.021	6.12	0.046	58.72
Unexplained (IV)	-0.034	-10.07	0.039	49.97
Total explained (I+III)	0.078	23.36	-0.046	166.74
Total unexplained (II+IV)	0.256	76.64	0.124	-66.74

Data source: 0.5% sample of 2005 population mini-census, Xinjiang

†In these pairs of comparisons, the decompositions of the sector income effect are based on the categories with an asterisk*, i.e. the local Han (as weights).

Table 6. Fixed-Effect Regression of Logged Earnings on Selected Independent Variables, Non-farm Sample in Xinjiang, 2005

	Government Institutions	Public Enterprises	Private Enterprises	Self-employed
Ethnicity (Han locals [omitted])				
Han migrants	0.030	0.099***	0.158***	0.098***
	(0.035)	(0.029)	(0.032)	(0.028)
Uyghur	-0.036	-0.128***	-0.338***	-0.419***
	(0.020)	(0.033)	(0.034)	(0.030)
Rural *hukou*	-0.228***	-0.013	-0.024	-0.044
	(0.031)	(0.031)	(0.032)	(0.023)
Male	0.067***	0.166***	0.188***	0.217***
	(0.015)	(0.018)	(0.023)	(0.020)
Age	0.043***	0.030***	0.020**	0.041***
	(0.006)	(0.007)	(0.007)	(0.006)
Age^2*100	-0.035***	-0.035***	-0.024*	-0.051***
	(0.008)	(0.010)	(0.010)	(0.008)
Education (primary or below [omitted])				
junior high school	0.007	0.071*	0.089**	0.095***
	(0.070)	(0.030)	(0.028)	(0.022)
senior high school	0.193**	0.209***	0.217**	0.187***
	(0.069)	(0.034)	(0.038)	(0.029)
college or above	0.362***	0.361***	0.457***	0.259***
	(0.069)	(0.038)	(0.048)	(0.048)
County	Controlled	Controlled	Controlled	Controlled
Occupation	Controlled	Controlled	Controlled	Controlled
Industry	Controlled	Controlled	Controlled	Controlled
Constant	6.417***	6.142***	4.673***	4.353***
	(0.401)	(0.493)	(0.274)	(0.275)
N	2619	3203	1980	4439
R-squared	0.445	0.570	0.583	0.458

Data source: 0.5% sample of 2005 population mini-census, Xinjiang.

Figures in parentheses are standard errors.

*p<0.5; **p<0.01; ***p<0.001

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