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SOCIAL DISCONTENT AND MINORITIES IN CHINA AND INDIA

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SOCIAL DISCONTENT AND MINORITIES IN CHINA AND INDIA

Ajit Bhalla, Dan Luo and Shujie Yao *

Abstract

China and India are the two largest and fastest growing developing economies in the world. However, rapid economic growth has been accompanied by rising income inequality and social discontent, especially among different religious and ethnic groups. Both countries have many similarities in economic development and the pattern of income inequality, but few comparative studies have been found in the literature about the welfare of their religious and ethnic minorities. This paper aims to fill this literature gap. It concludes that poverty and economic inequality is closely related with religion and ethnicity in both countries. In particular, poverty and inequality are two important factors responsible for social unrests in India's states of Jammu and Kashmir, and China's Xinjiang Autonomous Region, where the Muslims minority accounts for a large share of local population.

JEL: D63, Z12, R58

Key Words: China, India, Minorities, Inequality, Poverty

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Social Discontent and Minorities in China and India

Ajit Bhalla, Dan Luo and Shujie Yao

Introduction

China and India have been successful in terms of economic growth and development, but their success has been accompanied **by** rising inequality and persistent poverty. In both countries, inequality is multi-dimensional in the sense that the total population in each country is segregated into different groups by region, location or religion.

Minority and poverty have long been studied in the literature. Frisbie and Neidert (1977) use census data of the US in 1970 to investigate the relationship between poverty and the proportion of Mexican Americans and blacks. They find that the relative size of minority population emerges as an important factor for poverty and inequality in the US. Similar results are also found in Blalock (1957), Brown and Fuguitt (1977), and Tienda and Li (1987).

Taylor (1979) uses data of a one-in-one hundred sample of the full-time white-collar federal civilian workforce drawn from the US Civil Service Commission's automated data files. In general, his research confirms the existence of large minority/sex disparities after occupational stream and a number of employment-related variables are controlled. Weiss (1970) finds that a black has lower earnings than a white with the same years of schooling and improving the educational level of blacks would not necessarily raise their earnings.

Waters and Eschbach, (1995) use data from the US 1990 census and find that inequality among American minority groups increased continuously when compared with whites. Asians are the only major racial/ethnic minority group with a higher median family income than whites in the US, despite a higher unemployment rate. The poverty rate of blacks is about two times higher than that of whites.

Gustafsson and Li (2003) use data from two surveys of rural China. Their research

shows that despite an increase in the average income of minorities during the seven years study period, the growth of income of minorities was much slower than for the majority, leading to a widened minority-majority income gap.

Existing studies on the relationship between inequality and minority (or religion) may provide some useful information for our research, but few comparative studies are available for China and India, where frequent social unrests suggest that it is imperative to understand their social, economic and political causes. Although governments in China and India always argue that violence in their minority-dominant areas has been caused by religious/ethnic discontent, we suggest that inequality, poverty and social exclusion must have played an important role.

In China and India, apart from regional and rural/urban inequalities, inequalities between religious groups and national minorities are also important. Such inequalities can have more important policy implications than other types of inequalities and deserve a closer study to understand their nature and impact on social and political stability. For example, the unrest in Kashmir in India and the frequent riots in Xinjiang and Tibet in China are the most obvious political concerns for the Indian and Chinese governments.

Following the riot in Xinjiang in July 2009 when many people were killed and many buses were burned on the streets in Urumqi, the Chinese government has now realised that such political unrest is not a simple matter of religious conflict, rather, it can be due to rising inequality between the Hans and the religious minorities in Xinjiang.

Minorities are defined in terms of different criteria, namely, religion, caste, backward class, and language. India's religious minorities consist of Muslims, Christians, Sikhs, Buddhists and Zoroastrians. Among the Hindu majority as well as among religious minorities are so-called scheduled castes and tribes (SCs/STs, low-caste social groups), recognized by the Indian Constitution as those requiring special support to overcome prolonged discrimination by the upper-caste Hindu population. Religious minorities in India feel a sense of repression and alienation. In China, there are 55

ethnic minorities officially recognized by the government. With the exception of Uygur, Hui, Uzbek and Kirgыз, all other minorities practice Buddhism which is the main religion in China.

Islam and Buddhism are the two religions common to India and China. In China, Muslims (Uygur and Hui) are concentrated in Xinjiang and Ningxia while Tibetans are mainly Buddhists. Compared to India where social discontent among minorities is primarily among religious minorities and backward classes, in China the main discontent is among ethnic minorities, which are highly concentrated in a few poor Western provinces. Most Western observers and scholars argue that the discontent among minorities arises from political factors such as lack of religious freedom, political autonomy and human rights. In this paper we wish to establish whether discontent among minorities might well have economic roots instead. We examine whether social discontent might be due more to such economic factors as absolute poverty and widening income disparities between ethnic groups and the Han majority, lack of employment and education, and resulting marginalization and social alienation.

Minorities in both countries are relatively poorer than the Han majority in China and Hindu majority in India. Yet comprehensive and systematic studies on their living conditions, education, health and political status are few and far between. This research is intended to fill this gap.

Poverty incidence

In this section we analyse the poverty incidence among minorities in India and China. Several measures of poverty incidence are examined: headcount ratios and consumption per capita by religious minority.

India

We consider two indicators of poverty incidence: (1) the headcount ratio, that is, the number of people below a selected poverty line, and (2) monthly consumption per capita. The aggregate headcount ratio for India in Table 1 shows that Muslim minority as well as other minorities (Sikhs, Jains and Christians) recorded a decline

in the incidence of poverty between 1993-94 and 2004-05 in both urban and rural areas. However, the decline was far more important in rural areas than in urban areas.

Table 1 Poverty incidence in India by groups (headcount ratios)

Religious group	Rural (%)		Urban (%)	
	1993-94	2004-05	1993-94	2004-05
All-India average	37	28	33	29
Hindu majority	36	28	31	27
SCs/STs Hindus	50	41	51	46
Other backwards Hindus	--	19	--	25
Muslim minority	45	33	47	44
Other minorities	27	18	23	16

Notes: SC/ST = scheduled caste/tribe. Poverty headcount ratio is the proportion of people living below a poverty line.

Sources: Government of India (GOI, 2006), Appendix Tables 8.5 and 8.6.

Table 2 examines rural and urban poverty incidence over time in selected states in which Muslims are predominant. We notice that poverty incidence for the Muslim community declined in rural areas but increased in urban areas in the following states: Kerala, Maharashtra and West Bengal. For other minorities, both rural and urban poverty incidence increased in Jammu & Kashmir (J&K), whereas it declined in Kerala and West Bengal.

Table 2 Poverty in Indian states with large Muslim population (headcount %)

State	Muslim pop.	All		Hindu		Muslim		Other Minorities	
	2001	93-94	04-05	93-94	04-05	93-94	04-05	93-94	04-05
<i>J&K</i>	67								
-Rural		18	3	16	3	47	3	5	11
-Urban		5	10	5	9	23	11	0	5
<i>Assam</i>	31								
-Rural		45	23	40	16	55	38	63	23
-Urban		8	7	6	5	22	13	0	4
<i>Kerala</i>	25								
-Rural		25	13	24	13	32	17	21	7
-Urban		24	23	25	24	27	31	21	12
<i>West Bengal</i>	25								
-Rural		41	28	38	24	48	36	58	36
-Urban		23	24	20	21	41	44	27	21
<i>Indian total</i>	13								
-Rural		37	28	36	28	45	33	27	18
-Urban		33	29	31	27	47	44	23	16

Notes: The figures in the second column are shares of Muslim population as a proportion of total population in the respective province. Figures in other columns are headcount rates of poverty. J&K = Jammu & Kashmir.

Sources: GOI (2006), Appendix Tables 8.5 and 8.6.

China

It was not possible to estimate headcount ratios for Chinese minorities as the Chinese Academy of Social Sciences (CASS) survey data had very few minorities except Xinjiang. Instead, we estimated the rural headcount ratios for the two autonomous regions, viz. Guangxi and Xinjiang which are 7.6% and 12.7%, respectively, using the 2002 CASS data and the poverty line of 875 yuan. We also use the following three indicators for the five autonomous regions: (1) Annual GDP per capita (2) rural annual net income per capita and (3) annual grain output per capita.

In the absence of average per capita income we use GDP per capita as a proxy. In all the five regions, per capita GDP has been steadily rising, its growth being particularly rapid since 2000. However, rural per capita income barely rose between 1997 and

2001, and its rise in the subsequent years was also very slow, suggesting a widening income gap between the rural and urban populations. Grain output per capita hardly rose during the decade in any of the five autonomous regions. The reasons for this situation are unclear. One plausible explanation is that during particular years rural labour force may move to urban areas searching for work. This migration outflow reduces total grain output subsequently. If labour statistics fail to take account of the rural exodus, the denominator would be high and numerator lower, thus leading to a lower per capita output.

Figure 1.1 Xinjiang

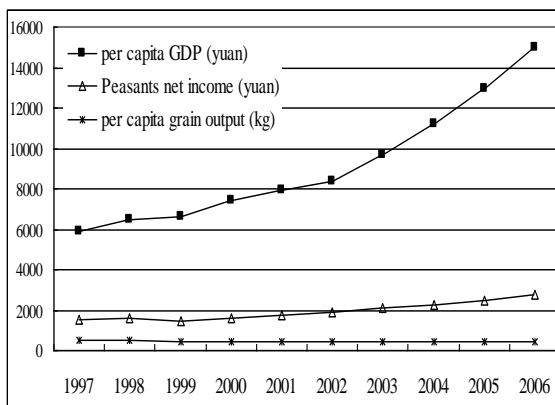


Figure 1.2 Tibet

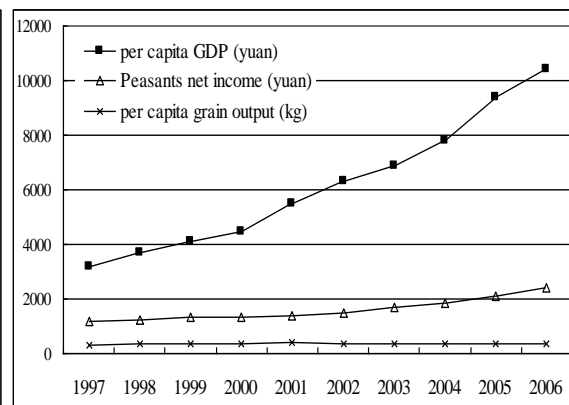


Figure 1.3 Ningxia Hui

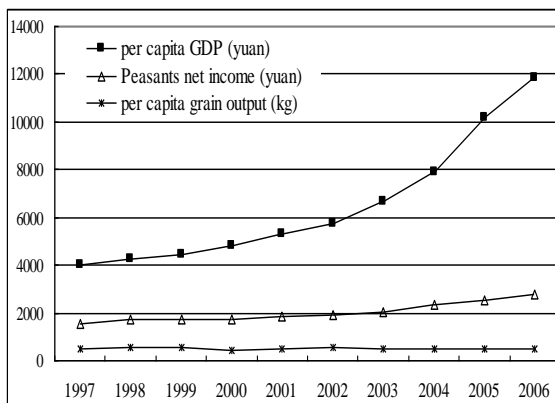


Figure 1.4 Guangxi

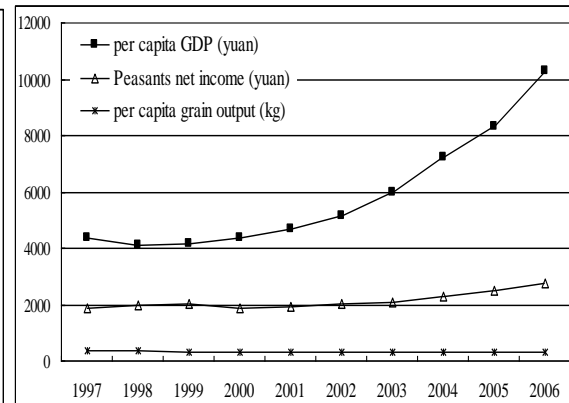
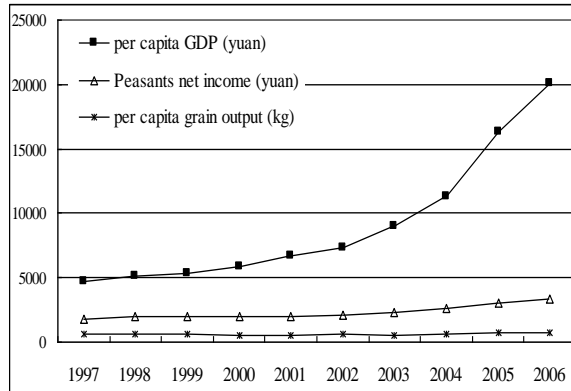


Figure 1.5 Inner Mongolia



Income/consumption inequality

Income inequality in India and China is measured by the Gini coefficient. The states with the highest monthly per capita consumption generally have a high Gini coefficient (indicating greater inequality) but they are not necessarily the ones with large minority populations. In India, for example, J&K with 67% Muslims has a fairly high per capita consumption and low Gini coefficient. However, Assam (31% Muslims) is an exception: inequality is higher among Muslims (Table 3). The poorest states are characterized by large proportions of SCs and STs.

Table 3 Gini coefficients in India by state and religion in 2004-05

States	Rural		Urban		All India	
	Hindu	Muslims	Hindu	Muslims	Hindu	Muslims
Jammu/Kashmir	0.2512	0.2390	0.2647	0.2259	0.2794	0.2432
HP	0.3114	0.2360	0.3323	0.2034	0.3309	0.2356
Punjab	0.3001	0.3198	0.4200	0.2215	0.3966	0.2748
Chandigarh	0.1925	0.3149	0.3596	0.3155	0.3644	0.4822
Uttaranchal	0.2849	0.2798	0.3133	0.2495	0.3102	0.2734
Haryana	0.3445	0.2058	0.3588	0.4210	0.3558	0.2868
Delhi	-	-	0.3387	0.3136	0.3384	0.3136
Rajasthan	0.2460	0.2227	0.3853	0.2298	0.3043	0.2282
Uttar Pradesh	0.2880	0.3013	0.3710	0.3239	0.3274	0.3169
Bihar	0.2096	0.1906	0.3402	0.2425	0.2408	0.2032
Sikkim	0.2792	0.2195	0.2587	0.2045	0.2878	0.2634
Arunachal	0.2758	0.2255	0.2486	0.1688	0.2701	0.2059
Nagaland	0.3942	0.0869	0.2026	0.2538	0.2508	0.2470
Manipur	0.1690	0.1135	0.1814	0.1510	0.1749	0.1303
Mizoram	0.1977	0.0000	0.2301	0.1392	0.2422	0.2278
Tripura	0.2169	0.2357	0.3406	0.1896	0.2830	0.2350
Meghalaya	0.1683	0.1326	0.2725	0.1998	0.2756	0.1488
Assam	0.1895	0.2001	0.3156	0.3394	0.2345	0.2296
West Bengal	0.2763	0.2602	0.3772	0.3287	0.3618	0.2807
Jharkhand	0.2302	0.2163	0.3569	0.3302	0.3264	0.2396
Orissa	0.2858	0.1394	0.3559	0.3212	0.3219	0.3246
Chhatisgarh	0.2989	0.3788	0.4436	0.2656	0.3721	0.3271
MP	0.2639	0.2610	0.3825	0.3363	0.3370	0.3217
Gujarat	0.2765	0.2346	0.3039	0.2836	0.3348	0.2731
Maharashtra	0.3168	0.2174	0.3608	0.3824	0.3882	0.3650
Andhra Pradesh	0.2940	0.2899	0.3806	0.2927	0.3487	0.2970
Karnataka	0.2524	0.2486	0.3683	0.3273	0.3583	0.3175
Goa	0.3036	0.0081	0.4301	0.2464	0.3956	0.2329
Lakshdweep	0.0000	0.3198	0.3368	0.3966	0.2728	0.3607
Kerala	0.3696	0.3969	0.4388	0.3604	0.3970	0.3893
Tamil Nadu	0.3214	0.2715	0.3617	0.3171	0.3773	0.3130
All India	0.2989	0.2930	0.3733	0.3379	0.3629	0.3235

Notes: Our estimates based on the NSS Consumer Expenditure Survey data (61st Round) (2004-05).

Table 4 presents Gini coefficients separately for seven Chinese provinces with minority population exceeding 9% of local population. In Guizhou, Liaoning, Hunan

and Jilin, these coefficients increased for the Han majority between 1995 and 2002, suggesting that income inequality increased over the data period. The Gini coefficient increased for both Han majority and minority populations.

Table 4 Gini coefficients in Chinese provinces with more than 9% minority population

Province	Year	Total Gini	Majority-Han			Minority			
			Gini	Income%	Pop%	Gini	Income%	Pop%	
Xinjiang (59.4%)	1995	--	--	--	--	Minority	--	--	--
	2002	0.333	0.309	28.0	17.1	Uygur	0.297	66.3	77.4
						Hui	0.294	5.7	5.5
Guangxi (38.4%)	1995	--	--	--	--	Minority	--	--	--
	2002	0.35	0.344	73.1	63.2	Chuang	0.3	25.9	35.5
						Others	0.268	1.0	1.4
Guizhou (37.8%)	1995	0.283	0.251	45.9	49.3	Minority	0.308	54.1	50.7
	2002	0.310	0.333	56.6	56.2	Miao	0.310	22.1	22.9
						Others	0.294	21.4	21.0
Yunnan (33.4%)	1995	0.321	0.333	50.0	48.8	Minority	0.309	50.0	51.2
	2002	0.280	0.317	31.6	34.2	Yi	0.297	15.1	16.7
						Hui	0.181	3.4	3.7
						Others	0.24	49.9	45.3
Liaoning (16.1%)	1995	0.305	0.296	58.1	63.6	Minority	0.303	41.9	36.4
	2002	0.402	0.399	47.6	55.0	Manchu	0.379	44.5	35.4
						Others	0.362	7.8	9.6
Hunan (10.1%)	1995	0.282	0.268	88.8	82.1	Minority	0.208	11.2	17.9
	2002	0.379	0.371	86.2	81.4	Miao	0.236	2.0	4.3
						Others	0.369	11.7	14.2
Jilin (9.2%)	1995	0.292	0.289	94.4	94.0	Minority	0.327	5.6	6.0
	2002	0.316	0.318	96.3	95.3	Manchu	0.261	3.7	4.7

Notes: Figures under the name of the province represent the percentage of minority population based on 2000 population census. The 1995 data used one single figure to represent minority population. It did not separate it into different nationalities. Income% = income share of total income, Pop% = population share of total population.
Source: CASS household survey data 1995 and 2002.

In 1995, the average Gini coefficients of Han and minority populations were 0.288 and 0.291 respectively, indicating that Han incomes were more evenly distributed. However, in 2002, the Gini coefficients rose to 0.342 and 0.292 respectively. The increase of the Gini coefficient for the Han population was much faster than that for the minority, making income distribution more unequal among the former than the latter. In fact, income inequality among the minority population remained roughly the same, but that among the Han majority rose by 20% over seven years.

Table 5 presents Gini coefficients and their components for China. The decomposition suggests that a major source of inequality comes from the groups themselves. Ga

which measures the income variations within each class accounts for more than 50% of the overall Gini coefficient with only a few exceptions (Guizhou, Yunnan and Liaoning 2002). In other words, income disparity between the Han and minority populations is not that large (Gb). Instead, it is inequalities within the Han and the minority populations themselves which contribute significantly to the overall Gini coefficient.

Table 5 Decomposition of Gini coefficients for Chinese provinces with minority

Province	Years	Gini	Decomposition of Gini			Contribution to Gini (%)		
			intra-class Ga	inter-class Gb	overlap Go	intra-class Ga	inter-class Gb	overlap Go
Xinjiang	1995	--	--	--	--	--	--	--
	2002	0.333	0.168	0.116	0.049	50.40	34.90	14.70
Guangxi	1995	--	--	--	--	--	--	--
	2002	0.350	0.187	0.100	0.064	53.30	28.44	18.27
Guizhou	1995	0.283	0.141	0.034	0.108	49.92	12.00	38.09
	2002	0.310	0.135	0.009	0.166	43.40	2.97	53.63
Yunnan	1995	0.321	0.160	0.012	0.150	49.86	3.62	46.53
	2002	0.280	0.096	0.048	0.136	34.42	16.97	48.61
Liaoning	1995	0.305	0.156	0.055	0.094	51.13	18.03	30.84
	2002	0.402	0.167	0.094	0.140	41.56	23.49	34.95
Hunan	1995	0.282	0.200	0.067	0.015	70.95	23.62	5.43
	2002	0.379	0.267	0.050	0.062	70.45	13.19	16.37
Jilin	1995	0.292	0.258	0.004	0.031	88.28	1.21	10.51
	2002	0.316	0.292	0.010	0.015	92.22	3.08	4.69

Source: CASS household survey data 1995 and 2002.

Literacy and education

We consider two non-income variables, viz. literacy and education (years of schooling) and access to health services (see the following section). Minority literacy rates in many poor Chinese provinces in southwest and west of China are well below the national average (Bhalla and Qiu, 2006:79). Illiteracy (concentrated mainly among minorities) partly explains their poverty and backwardness. The situation is somewhat similar in India.

Drèze and Sen (1995) discuss literacy and basic education in China and India and conclude that China has done much better. Does this conclusion hold when one considers majority-minority literacy rates separately? The Chinese minority literacy rates are low, especially in rural Tibet, 46%, for people 6 years old or above (2000 China Population Census). The rural rate for Tibet is even lower than that for SCs/STs in Orissa, 57%, according to the National Council of Applied Economic Research (NCAER) rural household survey for 2004-5, one of the poorest Indian states. It is also lower than the rural literacy rates for Muslims in U.P. and Bihar, 51% and 56% respectively, which are two other poor Indian states. Thus China's record looks much less impressive when one considers the case of minorities.

In India the literacy rate for Muslims is much lower (59% in 2001) and is well below the national average (GOI, 2006). It is particularly low in rural areas with the exception of Kerala, Tamil Nadu and Chhatisgarh. The Muslim female-to-male literacy rates show that the gender gap in urban areas is wide but it is much worse in rural areas.

In China, the rate of literacy for such Muslim minorities as Hui is much lower (82%) than that for the Han majority (over 91%). The female literacy rate among Hui is also lower, 76%, compared to the Han female literacy rate of 87%. Although the female rates for Uygur and Kyrgyz are higher, they are still lower than that of Han.

A comparison between different religious minorities in India shows that the Muslim community has consistently lower levels of mean years of schooling. On average, a Muslim child goes to school for only four years. Nearly 25% of Muslim children aged 6 to 14 have either never attended school or have dropped out of it. Their drop-out rate is the highest at the primary and secondary levels (GOI, 2006). At higher levels of education (university, for example) fewer Muslims are enrolled and even when they graduate, it remains hard for them to find jobs. Unemployment rates are the highest among Muslim graduates.

The CASS household survey data for China show that only 65% of the minority population has completed four or more years of schooling compared with 80% of the Han majority. There are similar gaps for both lower-middle and upper -middle

schools. Males among minorities have a much higher rate of educational attainment than females.

Several factors determine educational attainment: low education of parents or household head, per capita income, location, and ethnicity or minority status. We undertake a logit regression analysis to determine the influence of these factors on child educational attainment in rural China using two CASS household survey datasets for 1995 and 2002. We also estimate the marginal effects which capture an increased (or decreased) probability that a child will complete four or more years of schooling, given a one unit increase in the independent variables.

The regression results in Table 6 are striking. In both years, a minority status has a significant and negative impact on child education, *ceteris paribus*. It is also found that the education level of household heads plays a significant and positive role in the education of children. In addition, Communist Party membership, location (in suburb and plain compared to hilly areas) and per capita income are all found to have a significant and positive effect on their education. In 1995, children in female-headed households were found to achieve higher educational level than those headed by males, although the difference in 2002 became insignificant.

Table 6 Determinants of children education in rural China (1995, 2002)

	1995		2002	
	Logit regression	Marginal effects	Logit regression	Marginal effects
A. Minority status	-1.442*** (0.169)	-0.092*** (0.017)	-0.765*** (0.173)	-0.029*** (0.008)
B. Educational and other characteristics of household head				
4 or more years of education	1.223*** (0.211)	0.069*** (0.017)	0.818** (0.321)	0.034* (0.018)
1-3 years of education	0.096 (0.274)	0.003 (0.009)	0.351 (0.409)	0.009 (0.009)
Working in Agriculture	-0.154 (0.189)	-0.052 (0.006)	0.079 (0.159)	0.002 (0.005)
Male	-1.043** (0.418)	-0.024*** (0.006)	-0.293 (0.412)	-0.008 (0.009)
Communist Party member	0.413** (0.219)	0.012** (0.006)	0.233* (0.124)	0.010* (0.006)
C. Location and geography				
Plains	--	--	0.424*** (0.157)	0.013*** (0.005)
Hilly region	--	--		
Sub-urban	--	--	1.056*** (0.198)	0.049*** (0.013)
D. Per capita income				
Log (income)	0.535*** (0.097)	0.0188*** (0.003)	0.090 (0.098)	0.003 (0.003)
Constant	-0.595 (0.768)		2.616*** (0.813)	
Number of observations	4,479		5,468	
Pseudo R-squared	0.15		0.11	

Notes: In 2002 analysis, we did not include observations with less than RMB100 average income.

*, ** and *** means significant at 10%, 5% and 1% level respectively.

Access to health services

One indicator of the health status of minorities is the child mortality rate for which some data are available by religious minorities. Table 7 shows the infant (IMR) and child mortality (under 5MR) rates for 1981, 1991 and 2001 (the three Census years) for Muslims, Christians and Sikhs in India. They are compared with those of the Hindu majority. In 2001, the Muslim IMR was equal to the national average for all religions; but the CMR was below the average. The Christian IMR was higher than the national average although the CMR was much lower.

Table 7 Infant and child mortality rates by religion in India (number/1000 live births)

Religion		1981	1991	2001	
Average for all religions	IMR	115	74	72	
	U5MR	152	96	98	
Hindu majority	IMR	122	74	73	
	U5MR	155	97	99	
Minorities:	Muslims	IMR	92	68	72
		U5MR	135	101	95
	Christians	IMR	67	58	77
		U5MR	97	70	77
	Sikhs	IMR	75	55	*
		U5MR	108	67	82

Source: Census of India. *The series was too erratic so the IMR is not shown. IMR= Infant mortality rate, defined as the proportion of children dying before their first birthday. U5MR= Under five mortality rate.

We do not know of similar data on child mortality by ethnicity in China. However, there is some empirical evidence to suggest that ethnic minorities in China enjoy less access to health services and clean drinking water than the Han majority in rural China. A regression analysis based on the 1995 and 2002 CASS household survey data for rural China (Table 8) shows that minority status, low per capita income, household heads engaging in agriculture, living in mountainous areas, and living in designated minority areas are important factors that reduce access to health services, defined as the distance to a village health clinic. A similar regression uses access to clean drinking water generates similar results. Those factors which hold back access to a village clinic are the same factors holding back access to clean drinking water.

Table 8 Determinants of household access to health clinics in rural China (1995, 2002)

	1995		2002	
	Logit regression	Marginal effects	Logit regression	Marginal effects
Minority status (ethnicity)	-0.859*** (0.15)	-0.106** (0.02)	-0.032 (0.165)	-0.002 (0.0124)
Logarithm of per capita income	0.332*** (0.06)	0.031*** (0.01)	0.073*** (0.023)	0.005*** (0.002)
Head of household is illiterate	-0.251* (0.13)	-0.026 (0.01)	-0.373** (0.182)	-0.032* (0.018)
Head of household is male	0.231 (0.17)	0.023 (0.02)	0.135 (0.165)	0.010 (0.014)
Party member	-0.097 (0.10)	-0.009 (0.01)	0.060 (0.098)	0.004 (0.007)
Working in agriculture	-0.314*** (0.10)	-0.027*** (0.01)	-0.063 (0.077)	-0.005 (0.006)
Sub-urban areas	1.219*** (0.29)	0.074*** (0.01)	-0.998*** (0.111)	-0.105*** (0.016)
Plains areas	1.513*** (0.10)	0.141*** (0.01)	0.391*** (0.087)	0.029*** (0.006)
Hilly region	0.219*** (0.09)	0.020*** (0.01)	0.836*** (0.110)	0.055*** (0.006)
Designated minority region	-0.901*** (0.15)	-0.113*** (0.02)	-1.017*** (0.162)	-0.104*** (0.022)
Constant	-0.958* (0.51)		1.562*** (0.220)	
Number of observations	7,967		9,200	
Pseudo R-squared	0.15		0.06	

Notes: '***', '**' and '*' signify 1%, 5% and 10% significance levels, respectively.

For the five Chinese autonomous regions we compare urban and rural doctor-to-population ratios. Measured by the number of doctors per 10,000 people since 1999, the gap between urban and rural ratios has been widening in Xinjiang (Figure 2.1). In Tibet, the gap between the urban and rural ratios was reduced during 1979-99 but started to widen after 1999 (Figure 2.2). Can this be explained by the lack or absence of urbanization in Tibet which consists mostly of counties and rural areas? The narrowest gap between urban and rural ratios for doctors is seen in Inner Mongolia (Figure 2.5).

Figure 2.1 Xinjiang (number of doctors per 10,000 people)

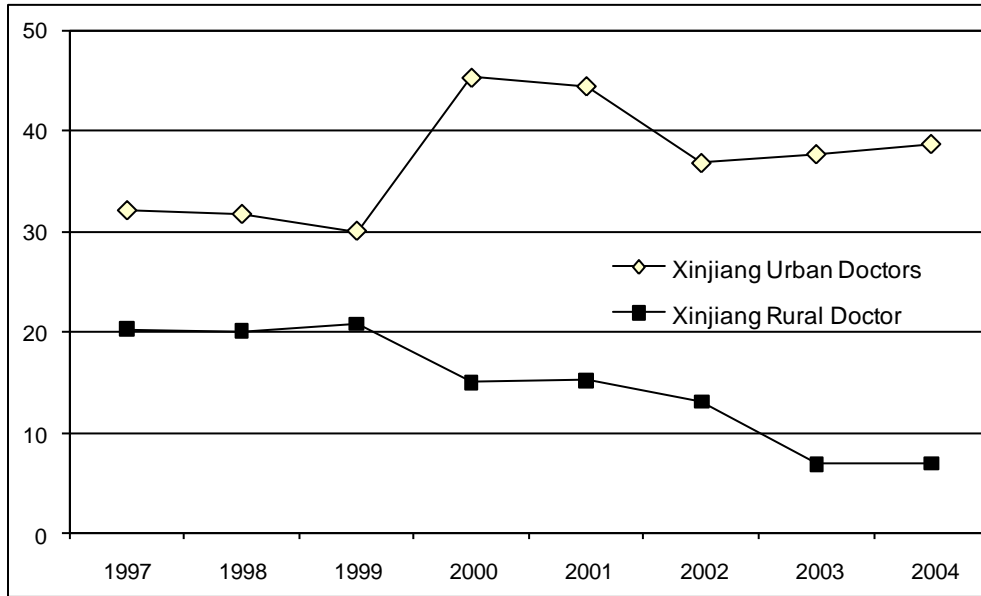


Figure 2.2 Tibet

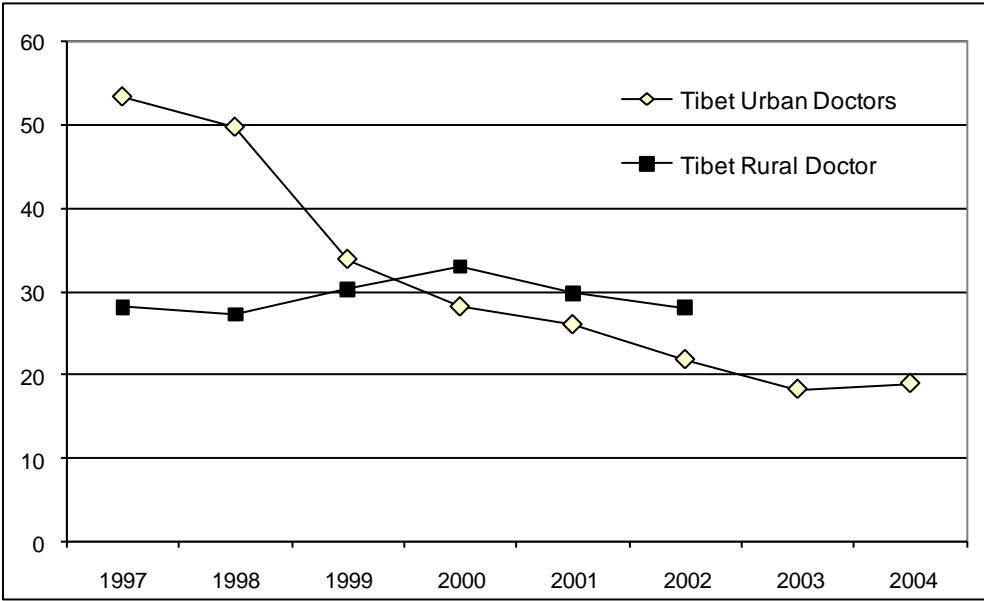


Figure 2.3 Guangxi

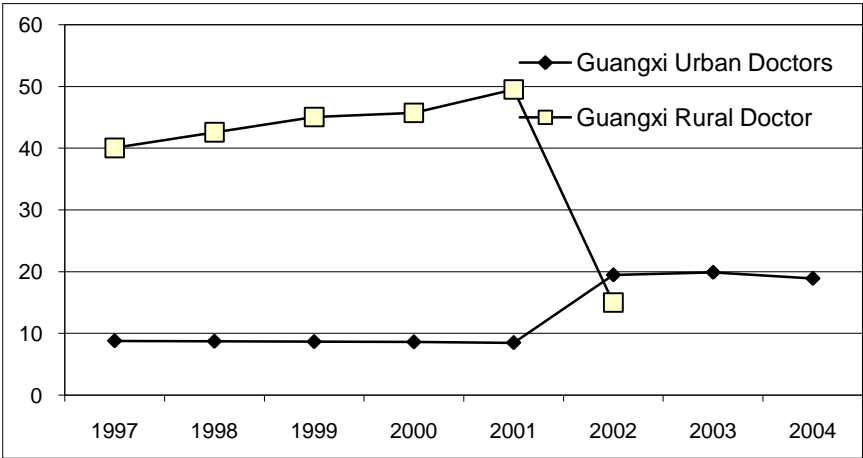


Figure 2.4 Ningxia

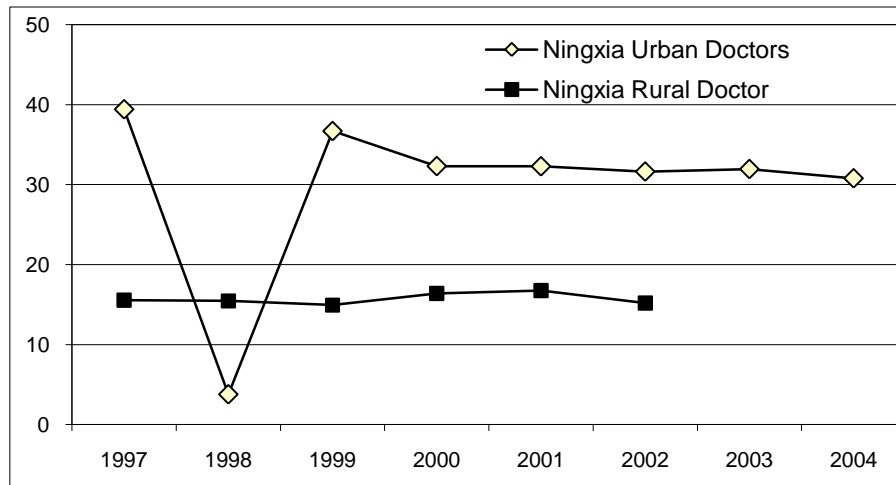
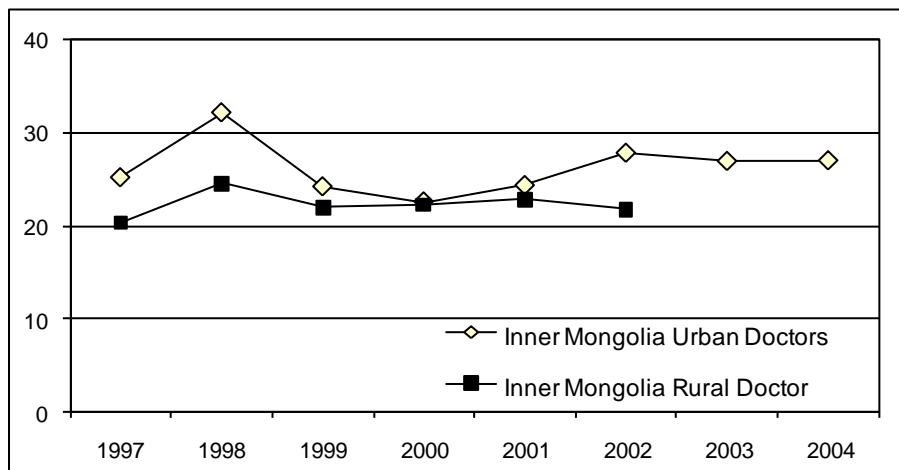


Figure 2.5 Inner Mongolia



A comparative study of Jammu & Kashmir (J&K) in India and Xinjiang in China

We now examine the status of Muslim minority based on J&K in India and Xinjiang in China. These two areas are suitable for a comparative study for the following reasons. Firstly, both areas have a Muslim population of over 60% of local population and they are considered to be disputed border areas. Secondly, social and political discontent has been growing for several decades, and lastly, the central governments have invested heavily for political reasons in both regions. Therefore, it

is appropriate to study whether such investments have reduced the level of discontent by leading to greater prosperity.

J&K was one of the princely states of India before India's independence in 1947. It was ruled by a Hindu Maharaja, Gulab Singh. At the time of India's independence the princely rulers were given an option to join either India or Pakistan. Hari Singh, the Maharaja at the time of Independence, signed an Instrument of Accession in October 1947. A part of Kashmir (known as Azad Kashmir) is occupied by Pakistan. While the head of this former princely state was a Hindu, its majority population is Muslim, which led Pakistan to claim sovereignty over the whole of Kashmir.

Poverty Incidence

The incidence of poverty (headcount ratio) in J&K with the highest share of Muslim population (67%) in urban areas in 2004-05 was 11% for Muslims compared to 9% for Hindus (Table 9). The ratio for Muslims was significantly higher (23%) ten years earlier in 1993-94. In fact, the urban poverty incidence declined for Muslims but increased for Hindus. The poverty head-count ratio for Hindus rose from 5% in 1993-94 to 9% in 2004-5. Rural poverty incidence also declined significantly for both Hindus and Muslims over the 10-year period. Poverty incidence is much higher in such other Indian states as Assam, Kerala and West Bengal with a substantial proportion of Muslim population. However, the incidence of poverty among Hindus is much lower in these states.

Why should the incidence of poverty among Muslim minority be much lower in J&K? It may well be that the Indian central government has invested much more heavily in this state for political reasons than in other states. If anything, these states, especially West Bengal, were until the general elections in 2009, governed by the opposition parties and not by the Congress-coalition governing at the Centre.

Rural per capita consumption of Muslims in J&K is close to that of Hindus, but urban per capita consumption is much lower. This situation is similar in other states such as Kerala and West Bengal with a sizeable Muslim population.

Income inequality measured by the Gini coefficient is much lower for Muslims compared to other minorities such as Sikhs, Jains and Christians. This may be because most people in J&K are poor. However, the reverse is true in Assam where inequality among Muslims is higher than among non-Muslims.

Literacy and Education

We consider three indicators to determine the educational attainment of people in J&K: (1) literacy rate, (2) school enrolment and (3) mean years of schooling (Table 10). On all accounts, Muslims are at a disadvantage relative to the Hindus. Their literacy rate is well below the Indian average as well as the rate for Hindus. The rural and urban rates are even lower than those for the disadvantaged SCs and STs. School enrolment (90.6%), which is also about the same as that among SCs and STs, is higher than the Indian average. However, the mean years of schooling (for children aged 7-16 years) is below the Indian average. It is only slightly higher than that among the SCs and STs.

In J&K the literacy rate for Muslims is much higher (91%) than the all-India average. This may be explained by high educational investment. In 2003-4, the share of educational expenditure in total disbursements was 9% for J&K compared to 6% for Himachal Pradesh, 3% for Punjab and 5% for India as a whole (Bhandari and Kale, 2009). But it is still lower than the literacy rate (96%) for the Hindus.

Table 10 Jammu & Kashmir, Educational indicators

Indicator	All	Muslims	Hindus	SCs/STs
<i>Literacy rate (%)</i>		47.3	71.2	46.5
-rural		43.0	65.0	57.0
-urban		63.0	85.0	68.0
<i>Enrolment, 6-14 years (%)</i>		90.6	96.3	90.0
<i>Years of schooling, 7-16 years</i>		3.41	7.76*	3.04
-rural		3.06	11.15*	2.90
-urban		4.78	5.43*	4.51
<i>All-India average</i>				
Literacy	64.8	59.1	65.1	52.2
Enrolment ratio	85.3	81.8	94.9	79.7
Mean years of schooling	3.95	3.26	4.39*	3.35

Source: GOI (2006). * refers to 'All others' including Hindus.

Health situation

Some data on child mortality show that Muslims in J&K have higher infant mortality than that among Hindus, but lower for under-five mortality (Table 11). It is not clear what explains this unusual situation considering that the Muslim community is relatively poorer and has lower levels of female schooling. In Assam with a Muslim population of 31%, both infant and under-five mortality rates are higher than those for the Hindus; in West Bengal (25% Muslims) both these Muslim rates are higher. However, Deolalikar (2006) notes, 'In virtually every region, with the sole exception of the Northeast, Muslims have the second-lowest infant and under-five mortality rates of any social group...In the South and West, their relative position is even better than in other regions'.

Table 11 Child mortality: Jammu & Kashmir and selected Indian states

State/indicator	All	Muslims	Hindus
A. Large Muslim population			
Jammu & Kashmir:			
-IMR	63	78	63
-U5MR	79	63	81
<i>Assam:</i>			
-IMR	62	68	57
-U5MR	80	87	76
West Bengal			
-IMR	51	52	50
-U5MR	71	77	68
<i>Kerala</i>			
-IMR	21	19	22
-U5MR	26	26	28
B. Small Muslim population			
<i>Madhya Pradesh</i>			
-IMR	93	78	94
-U5MR	145	99	149
<i>Tamil Nadu</i>			
-IMR	51	51*	50
-U5MR	71	56*	64
All-India average			
-IMR	73	59	77
-U5MR	101	83	107

Source: GOI (2006).

Note: The estimates are based on NFHS-2 1988-99 survey. They refer to the 10-year period preceding the survey. * Based on 250-499 births.

Infant mortality is influenced by biological, educational and socioeconomic variables. Generally, Muslims in India have lower incomes and female schooling than non-Muslims. Therefore, lower under-five mortality rates for Muslims in J&K are hard to explain. Can better infant feeding and nutrition (Muslims eat more meat than Hindus who are often vegetarian) and better childcare in general by Muslims explain their advantage? This is a field for further research.

To conclude, in J&K, the economic situation of Muslims is better than that in many other states with significant Muslim population. Their literacy rates and poverty situation is not as bad as in the rest of India.

Generally, poverty and deprivation can fuel conflict and militancy. Idris (2006) notes: 'The poor socioeconomic conditions of most Kashmiris have added to their frustration, and thus have been a factor in pushing them to support militancy.' However, the data presented in Tables 9 to 11 do not seem to support this argument. So our hypothesis in the case of J&K, namely, that extreme poverty and backwardness breed discontent and riots, is not proven. We need to examine whether lack of autonomy and political freedom and other non-economic factors such as culture and religion, explain violence and discontent in the state.

Huntington (1993) argues that the old Cold War divisions of the First, Second and Third Worlds are no longer relevant. He states: 'It is far more meaningful now to group countries not in terms of their political or economic systems or in terms of their level of economic development but rather in terms of their culture and civilization'. Does his argument hold for J&K inhabited by people of three different religious faiths, Muslim, Hindus and Sikhs? These are the factors accounting for differences across civilizations, which Huntington discusses. But are these differences among the above three religions so fundamental as to cause conflict? We do not think so.

Then how do we explain social unrest and violence in J&K? Three factors appear to be relevant: (1) Kashmiri nationalism, (2) Indian military occupation, and (3) Muslim

fundamentalism emanating from the Kashmiri territory occupied by Pakistan (Azad Kashmir). Terrorist attacks on Mumbai in November 2008 were planned in Pakistan and executed by Muslim militants from that country. India and Pakistan have fought three wars over Kashmir, the most recent limited war in Kargil in 1999.

Is violence in Kashmir attributed to Jihadist militants who may come from across the border in Pakistan? Kashmiri militants have top commanders and headquarters based in Pakistan or Pakistan-held Azad Kashmir. One view is that an internal conflict exists between Kashmiri Muslims and the Indian government who has for several years attempted to crush separatism through force. The use of force has hardened the resolve of the militants particularly in the face of the human rights abuses of the Indian security forces. The Prevention of Terrorism Act passed in 2002 may have provided a cover for such abuses.

Like Kashmir, Xinjiang is a border autonomous region of China. In the western part of China it borders India's J&K, Afghanistan and Pakistan, as well as Kazakhstan, Tajikistan and Kyrgyzstan in Central Asia. The Muslim population accounts for over 67% of the total population. In 1955, the province was designated as an autonomous region to appease its Muslim minority. Uygur (who speak Turkic language) form the bulk of the Muslim population and other Muslims include Kazakhs, Kyrgyz, Uzbeks and Tajiks, who originated in the Central Asian Republics which once formed part of the former Soviet Union.

For decades, GDP per capita of Xinjiang did not grow although overall growth of output took place to support a rapidly rising in-migration of Han population. In-migration of Han was a conscious policy of the central government to integrate Xinjiang with the rest of China. Xinjiang is remote in location, which makes communication with Beijing difficult.

Beijing's strategy in Xinjiang involved massive investment in infrastructure and agricultural/industrial development in the hope that greater economic prosperity of the local ethnic population would reduce support for insurgents and separatism.

Below we shall test this hypothesis, namely, that removal of poverty will provide political stability.

Poverty Incidence

In Xinjiang, both poverty incidence and income inequality are greater among the Han majority than that among Muslim minority (Uygur) (Table 14). Poverty and inequality indicators are lower for Xinjiang than for J&K. Rural-urban disparities in per capita consumption are minimal in Xinjiang compared to the rest of China (Wiemer, 2004). For example, 'the ratio of urban to rural per capita consumption in 2000 was 2.2 versus 3.5 for China as a whole, ranking it twenty-ninth among thirty-one provinces and regions'.

What explains this unusual situation? One reason may lie in the prevalence of large commercial farming instead of subsistence farming which is predominant in the rest of China. Agricultural output per worker in Xinjiang was more than double the national average for China in 2000. The degree of urbanization is also quite high in the province with 50% of its population living in urban areas. Disparities in income and consumption in Xinjiang are related more to ethnicity than rural-urban divide. For example, in Urumqi, the capital city of Xinjian, Uygurs earn 31% less than Han Chinese (Zang, 2011).

Table 12 presents decomposed Gini coefficients for rural Xinjiang and rural Guangxi. While the overall Gini coefficient is higher than that for Uygur and Hui, the two Muslim minorities, the coefficient for Han is higher than that for either of the two minorities suggesting that income disparity is greater among Han. This might be because Han have a wider range of income sources whereas income of rural minorities comes mainly from farming, planting, fishery and forestry. The decomposed Gini coefficient shows that the major source of inequality comes from intra-class disparity, which means that income variations within Han and within minorities themselves are relatively large. In both provinces, intra-class Gini contributes more than 50% of the Gini coefficient of the whole population.

Table 12 Decomposition of Gini coefficients in rural Xinjiang & Guangxi (2002)

	Xinjiang		Income share (%)	Population share (%)
Gini (G)	0.333			
Majority	Han	0.309	28.0	17.1
Minority	Uygur	0.297	66.3	77.4
	Hui	0.294	5.7	5.5
Gini Decomposition	Contribution to Gini (%)			
intra-class (G _A)	0.168		50.4	
inter-class (G _B)	0.116		34.9	
Overlapped (G _O)	0.049		14.7	
	Guangxi		Income share (%)	Population share (%)
Gini (G)	0.350			
Majority	Han	0.344	73.1	63.2
Minority	Chuang	0.300	25.9	35.5
	Others	0.268	1.0	1.4
Gini Decomposition	Contribution to Gini (%)			
intra-class (G _A)	0.187		53.3	
inter-class (G _B)	0.100		28.4	
Overlapped (G _O)	0.064		18.3	

Source: CASS Household Survey 2002.

Notes: intra-class component arising from income variations within each class; inter-class component arising from differentials of mean incomes between classes; and the overlapped component arising from the fact that poor people in a high-income class may be worse off than rich people in a low-income class.

Literacy and Education

Minority enrolments for Xinjiang show a decline at primary schools between 1990 and 2000 (*Xinjiang Statistical Yearbook*, 2006). Reasons for the decline are unclear. It may be explained by a high drop-out rate at that level. The share of Xinjiang in secondary school enrolment was the same in 2005 as in 1997 (a little over 12%). That in higher educational institutions actually declined from 22% in 1997 to about 19% in 2005 (*China Ethnic Statistical Yearbook*).

We apply the logit model to identify factors determining the income level of a particular household within the sample. The CASS survey for 2002 for Xinjiang includes households in rural Xinjiang with an average per capita annual income of 3,491 yuan. The dependent variable (Y) is the household income. It takes the value of 1 if household income is not less than 3491 yuan per year and 0 if income is less than this threshold. The explanatory variables include (1) dependency ratio (% of household members at 17 or below, or older than 60), (2) years of schooling, (3) total educational expenditure, (4) total medical expenditure, (5) minority status and (6) access to electric lighting and drinking water. Table 13 presents results mainly for illustrative purposes.

Table 13 Determinants of the income level, Xinjiang (2002)

Logic regression	Coefficients	t-values
Log(Years of schooling)	0.118	2.32***
Log (Dependency ratio)	-1.760	-3.19***
Log (Medical expenses)	-0.001	-0.81
Log (Education expenses)	-0.002	-0.80
Electricity and water (0, 1)	0.313	1.40
Minority (0, 1)	0.599	2.93***
Constant	-1.409	-3.06***

Notes: '***' significance at 1% level. Dependent variable takes the value of 1 if household income is 3491 yuan/year or more, and 0 otherwise.

Sources: Our estimates based on CASS household survey data.

Three variables, years of schooling, dependency ratio and household's ethnic minority status influence the probability of having an above-average income significantly. For households with greater number of dependents and belonging to ethnic minorities, average incomes are relatively low because fewer people are working. Access to electricity and drinking water does not appear to have a significant impact on household incomes.

Poverty among minorities in Xinjiang can be attributed to lack of access to well-paid jobs. During the pre-reform period, the state sector was the main source of employment. However, state employment has gradually been declining. Between 1995 and 2000, it declined by over 600,000 jobs. The share of state employment in total urban employment declined from 81% in 1995 to a little over 70% in 2000 (Wiemer, 2004).

Our concern here is not so much aggregate employment as employment of different nationalities and ethnic groups. Such information shows that self-employed businesses are more predominant among Hui Muslims and Han Chinese than among Uygur Muslims who form a majority in the province. Commerce and catering is the most important type of self-employed business among these three types of ethnic groups. Wiemer (2004) notes that the Han Chinese occupy 'the preferred jobs in *staff and worker* positions in state and collective units'. He further notes that 'this class of employment in 2000 covered 60% of all non-agricultural jobs, 19% of agricultural jobs and 37% of the combined total. The non-Han share in this employment was only 30%, barely half of its 59% share in the population. To some extent this differential might be explained by a lower share for non-Han in the labour force than in the population due to their higher birth rate, younger age profile, and to the higher rate of in-migration for working-age Hans.

Health

Xinjiang's health indicators compare favourably with those of many other provinces in China. For example, life expectancy in Xinjiang has increased steadily. However, averages conceal large disparities. There is some evidence to show that Uygur are much worse off. Survey data for infant mortality show that in 2001 there were 51 deaths per 1000 live births in the region as a whole, which is well above the national average of 30. Reports suggest that the infant mortality rate for Uygur is much higher, at about 108 deaths per 1000 live births (NBS, 2010). Dautcher (2004) notes: 'It is safe to conclude that Xinjiang Uyghurs living in areas of severe poverty and deprivation face significantly greater difficulties in meeting basic health needs than do their ethnic brethren in more developed parts of Xinjiang and across the border'.

Concluding remarks

In this paper, we examine poverty and inequality among religious minorities in China and India. We compare poverty situation of minorities on the basis of such indicators

as headcount ratios, per capita rural and urban consumption and per capita grain output. For India these indicators are examined for Hindu majority and Muslim minority in selected states with a sizeable Muslim population.

We discuss poverty in terms of such non-income variables as access to education and health services in both countries. Although there is lack of strictly comparable data, whatever data available are quite revealing about the disadvantaged position of minorities in both countries.

For India, we examine income/consumption inequality by estimating Gini coefficients for Hindu majority and Muslim minority for rural and urban areas in all the states. For China, we compare minority and majority Gini coefficients in 1995 and 2002 for the following provinces: Guangxi, Guizhou, Hunan, Jilin, Liaoning, Xinjiang and Yunnan.

We test a hypothesis that social and political discontent might have economic rather than political roots. This is done by comparing two areas suffering from discontent and violence: J&K in India, and Xinjiang in China. We conclude that socioeconomic conditions of Uygur in Xinjiang are bad as their access to jobs, education and health services is limited. This suggests that violence, civil strife and discontent in the province may have economic roots. Urban unemployment among young Uygur is high, leading to poverty and discontent. These youth are likely to fall an easy prey to violence out of desperation. One observer has noted that 'the vast majority of incidents apparently arise not from separatist sentiment but from more general forms of alienation' (Gladney, 2004).

Xinjiang is different from J&K. Muslims from J&K have lower inequality than Muslims in Xinjiang, but their poverty incidence is higher.

The central governments of China and India poured vast amount of resources into the two troubled areas for political and strategic reasons. Apparently, in J&K, these investments have led to greater benefits for Muslims than in Xinjiang. This is not to

suggest that economic incentives offered to Uygur and other Muslims in Xinjiang had no effect. Over the years the socioeconomic situation of Uygur and Hui has improved, partly explaining a decline in separatist incidents since the late 1990s (Gladney, 2004). Whatever social tensions that remain may be the result of external factors as well as some high handedness of the central Chinese authorities. However, it is unclear whether there is much local support for separatism and terrorism in Xinjiang.

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