

THE HOUSEHOLD REGISTRATION SYSTEM AND SOCIAL STRATIFICATION IN CHINA: 1955–1996*

XIAOGANG WU AND DONALD J. TREIMAN

The Chinese household registration system (hukou), which divides the population into "agricultural" and "nonagricultural" sectors, may be the most important determinant of differential privileges in state socialist China, determining access to good jobs, education for one's children, housing, health care, and even the right to move to a city. Transforming one's hukou status from rural to urban is a central aspect of upward social mobility. Using data from a 1996 national probability sample, we show that education and membership in the Chinese Communist Party are the main determinants of such mobility.

Kural-to-urban migration is a pervasive feature of the developing world (Kasarda and Crenshaw 1991). Driven by real or perceived differences in economic opportunities (Lee 1966; Todaro 1976), the needs of families to diversify risk in the absence of formal insurance mechanisms (Portes and Böröcz 1989), or social-network connections with others who have preceded them (Massey et al. 1993), peasants flock to the cities in search of better lives. Massive and uncontrolled migration from the countryside into urban areas typically accompanies economic development in developing nations. China, however, has been an exception since early in the communist era. Recognizing that extensive rural-to-urban migration would undercut the attempt to develop an urban welfare state, the communist government in 1955 established a registration system that classified each member of the population as having agricultural (rural) or nonagricultural (urban) status (*hukou*), with a sharp differentiation of rights and privileges and extremely stringent conditions for converting from rural to urban status.

The *hukou* system has had its intended effect, severely restricting rural-to-urban migration. In the prereform era, almost everyone lived where he or she was registered, and the de facto and de jure populations of the cities were nearly the same. Since the economic reform began in the late 1970s, informal migration (change of residence without a change in *hukou* status) has become somewhat easier, resulting in a large "floating population" of urban migrants who lack the entitlements of permanent residents (Roberts 1997; Solinger 1999). As we will show, formal or "government-sponsored" migration, entailing a change in *hukou* status, remains difficult.

The previous literature on migration and urbanization in contemporary China has largely neglected the institutional aspect of rural-urban mobility, the conversion of *hukou* status per se (*nong zhuan fei*) (e.g., Liang and White 1996; Yang 1993), even though *hukou* conversion strongly affects life chances independently of residential mobility. Although some studies have referred to constraints of *hukou* status on rural-to-urban spatial migration (e.g., Roberts 1997; Wang, Zuo, and Ruan 2002; Yang 1993), they have

^{*}Xiaogang Wu, Division of Social Science, Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong, China; E-mail: sowu@ust.hk. Donald J. Treiman, Department of Sociology, University of California, Los Angeles. This research was supported by grants to UCLA from the Ford Foundation–Beijing, the Luce Foundation, and the National Science Foundation (SBR-9423453), to carry out the survey of *Life Histories and Social Change in Contemporary China* analyzed here, and a Mellon postdoctoral fellowship to Wu at the Population Studies Center, University of Michigan. We thank William Mason and Judith Seltzer at UCLA, Yu Xie at the University of Michigan, and the anonymous referees for their helpful comments.

provided little information on how individuals overcome institutional hurdles and achieve urban *hukou* status. This article aims to fill this gap. Using data from the 1996 survey of Chinese Life Histories and Social Change (Treiman and Walder 1996), we studied the effect of *hukou* origin on life chances and the process of obtaining an urban *hukou* for those from rural origins.

In the following sections, we briefly review the history of the *hukou* system and examine how *hukou* origin (status at age 14) affects two aspects of life chances: attainment of higher education and Communist Party membership. We then investigate the factors that determine *hukou* mobility from rural to urban status and examine the temporal trend in *hukou* mobility. Finally, we discuss the implications of the findings for the analysis of place stratification, migration, and social mobility in China.

THE CHINESE HOUSEHOLD REGISTRATION SYSTEM

In 1955, as one of its procedures for solidifying administrative control, the new Chinese communist government established the household registration system, still in place today. All households were registered in the locale where they resided and were categorized as either agricultural or nonagricultural households.¹

The installation and subsequent tightening of the *hukou* system reflected an effort by the government to cope with demographic pressures in the course of China's rapid socialist industrialization. As part of the first Five-Year Plan (1953–1957), millions of peasants were recruited by burgeoning state industrial enterprises in urban areas, and many more moved without restriction to look for jobs in urban areas (Meisner 1999). To curb this rapid influx into cities, the registration system divided the population into agricultural and nonagricultural sectors as a basis both for restricting further rural-to-urban migration and for returning rural migrants to the countryside (State Council 1986 [1958]). Enforcement of the *hukou* regulations became especially stringent in the aftermath of the Great Leap Forward (1958–1960). About 18 million urban workers were sent back to their home villages between 1961 and 1963 (Chan 1994:39).

The effectiveness of the *hukou* system in restricting internal migration relied on two other administrative systems through which rationing was carried out. On the rural side, the commune system enabled local governments to bind peasants to the land. All adults in communes had to participate in agricultural production to receive food rations for their households (Parish and Whyte 1978), and migration was generally prohibited except with the permission of the local governments. On the urban side, the principal administrative units for most urban residents were the workplace organizations (*danwei*), which administered most social services for their employees (Bian 1994; Walder 1986; Wu 2002). Without a work unit, it was difficult to survive in a city because housing, food, and other social services were hardly available through the market. Moreover, because employment quotas in all urban work units were tightly controlled by the government's labor administration (Walder 1986), even rural migrants who left their home villages would have little chance of getting jobs in cities. This tight administrative control on both sides virtually eliminated unauthorized rural-to-urban migration in the prereform era.

Economic reform in the past two decades relaxed this administrative control. First, the abolition of the commune system and the introduction of the "household responsibility system" made individual households responsible for particular plots and allowed

^{1.} There are two classifications in the Chinese household registration system. The first is the *place* of registration (*hukou suozaidi*), based on one's residential location. The second is the *type* of registration (*hukou leibie*), generally referred to as "agricultural" and "nonagricultural" *hukou* or "rural" and "urban" *hukou* (Chan and Zhang 1999:821–22). It is the latter that has created a pronounced distinction in socioeconomic entitlements among Chinese citizens and that has significantly shaped the order of social stratification in the country, al-though place of registration also affects life chances to some extent.

producers to sell any surplus grain on the open market, greatly improving the efficiency of agricultural production. Peasants were thus freed from the land to seek jobs in the industrial and service sectors (Liang 2001; Lin 1988). Second, the erosion of the rigid *danwei*-based rationing system created social space for rural migrants in urban areas (Liang and White 1997:322). To enhance the development of the urban service sector, the government allowed peasants to enter cities and establish small businesses, such as shoe-repair shops, barbershops, and restaurants (Wu and Xie 2003). Furthermore, the growing market sector outside the redistributive system demanded more cheap labor. Even some state-owned work units preferred to hire rural peasants either because they had no commitment to peasant-workers' housing and other social benefits or because the jobs were unattractive to urban workers. Hence, both push and pull factors increased the propensity to migrate from the countryside into the cities. By the end of 1990, the rural migrant labor force in cities had reached 80 million (Liang and Ma 2003).

Although geographic mobility and change of employment have become relatively easier, the social concomitants of *hukou* status still persist. No matter how similar their jobs are to those held by urban workers, employees with rural *hukou* status are still classified as "*peasant*-workers" and thereby are not entitled to the many labor rights and benefits enjoyed by employees with urban *hukou* (Wang et al. 2002). As Chan (1994:135) stated, "Chinese reform socialism has created, structurally, a sizable 'second class' of urban citizens without permanent urban household registration status. This informal segment of urban labor and population is an extension of the rural segment, which was largely bottled up in the countryside under Mao." In the reform era, the *hukou* system has remained largely in force and still greatly shapes socioeconomic status and life chances.²

OBTAINING URBAN HUKOU STATUS: HYPOTHESES

Hukou status can be thought of primarily as ascribed, rather than achieved, since it is defined at birth on the basis of the mother's status and cannot easily be changed (Chan and Zhang 1999). Although governmental policies had encouraged urban residents to move formally to rural areas, there was essentially no voluntary mobility in that direction, given the huge advantages associated with urban *hukou* status. *Hukou* mobility, therefore, was mainly from rural status to urban status (*nong zhuan fei*), which was highly restricted by governmental regulations.

Yet both institutionalized and noninstitutionalized channels for *hukou* mobility did exist, even during the harshest period immediately after the Great Leap Forward. Through various means, some rural *hukou* holders were able to acquire urban *hukou* through their own efforts. Here are the main factors that we think govern the conversion of *hukou* status.

The first is education. According to *hukou* regulations, students are granted urban *hukou* status upon admission to specialized secondary (*zhong zhuan*) or tertiary (*da zhuan* or *ben ke*) schools (State Council 1986 [1958]). Whereas access to urban primary and regular middle schools is essentially restricted to local (permanently registered) residents, specialized secondary and tertiary schools (hereafter, higher education) are, in principle, open to all citizens on the basis of merit (usually assessed by examination scores). Thus, junior high school graduates with a rural *hukou*, have (and had) two strategies for gaining an urban *hukou* via higher education. The first is to gain admission to a specialized secondary school (*zhong zhuan*), which confers urban *hukou* status immediately upon admission. The second is to gain admission to an academic senior high school and then to try to get admitted to a tertiary school. Tertiary education confers both urban *hukou* status and

^{2.} To be sure, the *hukou* system has undergone significant changes over the years, particularly with the introduction in the 1990s of the "blue-stamped *hukou*"—local urban registration available for a substantial fee (Chan and Zhang 1999). These changes, however, have no effect on our analysis because they were implemented only recently. Moreover, they affect only a small fraction of the total population.

nonmanual jobs, but the risk is that students from rural origins, after finishing three years of academic high school, may fail in the National College Entrance Examination and hence have to return to their home villages and work as peasants. Thus, we expect, other things being equal, that people with higher levels of education are more likely to change *hukou* status than are those with lower levels of education. Specialized/vocational education and tertiary education are particularly important.³

Two other ways of changing *hukou* status are to join the Chinese Communist Party (CCP) or the People's Liberation Army (PLA). Although CCP membership and PLA military experience do not guarantee an urban *hukou* status, political loyalty manifested in these ways is thought to improve upward career mobility and the odds of eventually gaining an urban *hukou*. For example, rural CCP members may be able to serve as rural "cadres" (village heads, village party secretaries, heads of village enterprises, or village accountants). Some of these "peasant cadres" are promoted to leadership positions at the township level, making them part of the state bureaucratic system and hence eligible to change to urban *hukou* status. This career path suggests that CCP members are more likely to change *hukou* status than are non-CCP members.

Because the CCP does not actively recruit in rural areas, Party membership is generally not accessible to ordinary peasants. A well-known strategy for rural youths who are seeking upward mobility is to join the PLA and then to acquire Party membership while in the army (Chan 1994). After being discharged, a former PLA member can either obtain an urban job directly, and thereby change *hukou* status, or return to his village and start a career as a rural cadre. Thus, PLA experience can be seen as a quasi-political credential that offers an alternative to higher education as a way for rural *hukou* holders to alter their status. Hence, we expect that people with military experience are more likely to change *hukou* status than are people without military experience.

In any examination of the potential to obtain an urban *hukou* status, gender inequality must be considered. Because traditional practices, particularly patrilocal marriage and the transfer of women's obligations from their parents to their husband's parents, remain stronger in rural than in urban China, rural women are particularly disadvantaged in acquiring educational and political credentials. But even net of such credentials, they are less likely to enjoy the sponsorship of their families; when a family uses social connections for its children's future, sons generally have priority (Lin 2000:291). Thus, we expect that other things being equal, men are more likely to change *hukou* status than are women.

Although rural children inherit *hukou* status from their families, relatively advantaged rural families are positioned to help their children achieve urban status when opportunities become available—which, although rare, sometimes occur. For example, occasionally workers have been recruited from rural villages to state enterprises with the promise of urban *hukou* (Chan and Zhang 1999). Children of CCP members often had privileged access to those opportunities through their parents' formal or informal influence, net of their own educational and political credentials. Hence, net of others factors, people whose parents were CCP members when they were growing up (at age 14) are more likely to have changed *hukou* status than are people whose parents were not CCP members.

Finally, urban connections in a mixed *hukou* family⁴ (typically an urban father and a rural mother) may facilitate *hukou* mobility. Because children's *hukou* status generally

^{3.} While vocational, technical, and specialized high schools have different consequences for life chances, no data source we have been able to locate, including the 1990 Chinese census, has subdivided these categories. In the following analysis we use these terms interchangeably.

^{4.} These are families in which the husband has an urban *hukou* and the wife has a rural *hukou*, or vice versa. Such families exist because marriage to a person with an urban *hukou* does not unconditionally entitle one to permanent urban *hukou* status (Whyte and Parish 1984). Calculations from the 1990 Chinese census indicate that at least 8.7% of married couples in China had mixed *hukou*. This is probably an underestimate for

follows that of their mothers (State Council 1986 [1958]), urban-status fathers in mixed *hukou* families cannot easily transfer their occupational achievement in the urban sector to their children. However, the sharp contrast between rural and urban *hukou* is especially salient within such families, which may provide not only additional motivation for children to change their lives but also access to urban resources that offer information on how to take advantage of educational and employment possibilities. Furthermore, the *dingti* policy in the 1980s allowed one child to take over the parent's job in the *danwei* when the parent retired; thus, children who were born to rural mothers and urban fathers could change their *hukou* status from rural to urban if they took over their fathers' jobs (Bian 1994:55; Walder 1986:67). Hence, all else being equal, people whose fathers were employed in state work units when they were growing up (at age 14) are more likely to have changed *hukou* status than are people whose fathers were not employed in state work units.

367

All in all, notwithstanding the rigid segmentation of China into urban and rural components, a few formal and informal channels allow rural residents, particularly men, to obtain urban status. These channels include obtaining higher education, joining the PLA and/or the CCP, and exploiting family connections to seize special opportunities. Together, these channels were presumably used by the approximately 11% of the 1996 rural-origin population who had obtained urban *hukou*. Another 3% were able to change *hukou* without changing residence, presumably because their villages were incorporated into towns or cities.

Although researchers generally concur regarding the factors that influence *hukou* conversion, to date no one has quantitatively assessed the impact of each of these factors. With China on the eve of substantially restructuring the household registration system after two decades of market reforms, social scientists still lack a full understanding of how the system has worked and what impact it has had on generations of Chinese, especially those from rural origins. Thus, such an empirical assessment is in order. In this article, we formally test the hypotheses just presented regarding the factors that influence the odds of converting from rural to urban *hukou* status. However, we first examine how *hukou* origin status shapes access to education and CCP membership.

DATA AND VARIABLES

The data used in this analysis were from the survey of Life Histories and Social Change in Contemporary China (Treiman and Walder 1996), a multistage stratified national probability sample of 6,090 adults aged 20–69 from all regions of China (except Tibet). Samples from rural and urban areas were drawn separately, yielding 3,003 rural cases and 3,087 urban cases (see Treiman 1998: appendix D for details). The survey questionnaire contains extensive information on respondents' life histories and the characteristics of family members.

Information on respondents' household registration status (*hukou*), occupations, education, and political affiliation and similar information about the respondents' parents are exploited in the following analyses. *Hukou* status at three time points was collected: *hukou* at birth, *hukou* at age 14, and current *hukou* status. The rank of the place of residence in the Chinese urban hierarchy (ranging from "village" to "national-level city") was also recorded for the same three time points. This information is nearly complete, with few missing observations. We used *hukou* status at age 14, instead of *hukou* status at birth, as our measure of origin status on the grounds that *hukou* status at age 14 is a better predictor of adult life chances than is *hukou* status at birth for the small fraction of the population

two reasons. First, the way information was recorded in the census permits matching only the head and spouse, the parents of the head, and the grandparents of the head. Thus, married children of the head who are living in the household with their spouses are excluded from the calculation. Second, many married couples with mixed *hukou* live apart.

for which these two indicators are not identical. The 19% of respondents who were born before 1941 and some who were born in 1941 had no *hukou* at age 14 because the *hukou* system was introduced in 1955. For these respondents, an origin *hukou* was imputed on the basis of residence at age 14: those who lived in villages were assumed to have rural *hukou* origin, and those who lived in towns and cities were assumed to have urban *hukou* origin. These manipulations permitted us to construct two binary variables: *hukou* status at age 14 and current *hukou* status (urban = 1, rural = 0). Other variables included in the analyses were as follows:

Respondent's education appears both as an outcome variable in a model focusing on the effect of *hukou* origin and as a major factor affecting the odds of obtaining an urban *hukou* for the rural-origin population. To distinguish the educational levels leading automatically to urban *hukou* (specialized secondary and tertiary education), we recoded education into four levels: junior high school or lower, academic senior high school, specialized/vocational high school, and any tertiary-level institution (college or higher). In the event-history analysis reported later, respondent's education refers to the educational level in the year of risk.

Respondent's Party membership was coded as a dichotomy (Party member = 1, nonmember = 0). Respondents were asked the year they joined the CCP only if they indicated that they were Party members at the time of the interview. Thus, we have no way of identifying former Party members. For the event-history analysis, party membership refers to the status in the year of risk.

Military experience was constructed on the basis of the respondent's work history. It was coded as a dichotomy (yes = 1, no = 0) and, for the event-history analysis, refers to whether the respondent had military experience by the year of risk.

Place of residence at age 14 was coded into the seven categories of the Chinese urban hierarchy: villages = 1, towns = 2, county seats = 3, county-level cities = 4, prefecture-level cities = 5, provincial capitals = 6, and the directly administered municipalities = 7.

Parental education was measured by the years of school completed by the respondent's father or mother, whichever was higher. The 20 people (12 rural-origin people) for whom data on both father's and mother's years of schooling were missing were omitted from the analysis.

Parental Party membership, a dichotomous variable, was coded 1 if either parent was a Party member when the respondent was age 14 and 0 otherwise.

Parental ISEI (International Socioeconomic Index of Occupations) is a scale of occupational status, ranging in principle from 0 to 100 (Ganzeboom, De Graaf, and Treiman 1992). The Chinese Standard Classification of Occupations (National Standards Bureau 1986), which was used to code the occupational data in the survey, closely matches the 1968 International Standard Classification of Occupations (International Labour Office 1969); thus, 1968-basis ISEI scores were assigned to the data. For this analysis, we used the higher of the mother's and the father's ISEI when the respondent was age 14. The 292 people (171 from rural origins) for whom data on both father's and mother's occupations were missing were omitted from the analysis.

Father's work unit, a dummy variable, was coded 1 if the father worked in the state sector (that is, in a governmental agency, state institution, or state enterprise) when the respondent was age 14 and 0 otherwise. This variable better captures the possibility that the father had urban *hukou* status than whether he worked in a work unit (*danwei*) because many peasants work in private/collective work units without changing their *hukou* status. We have no direct measure of father's *hukou* status.

Gender, a dummy variable, was coded male = 1 and female = 0.

Period refers to one of five periods during which a respondent might have been "at risk" of changing status. Period 1 (1955–1958) is the initial stage, during which the *hukou* system emerged as the government's main way of regulating labor migration. Although

the *hukou* system was installed in 1955, during Period 1, rural peasants could still move into cities without official governmental approval. In Period 2 (1959–1965), the Chinese government started implementing a restrictive *hukou* policy. Thus, we expect a significantly lower rate of *hukou* mobility than in the previous period. Period 3 (1966–1976) covers the period of the Cultural Revolution. Even though the political system was thrown into chaos then, the *hukou* system remained stable. Period 4 (1977–1986) was the early stage of economic reform. Despite partial reform in the economic sphere, the rigid *hukou* system remained unchanged. Period 5 (1987–1996) was a time of deepening reform during which the *hukou* system was relaxed to some extent.

Birth cohort was included as a set of dummy variables (1927–1936, 1937–1946, 1947–1956, 1957–1966, and 1967–1976) in the binomial logit analysis to ensure that changes over time in the distribution and effects of other variables did not distort estimates of the effect of *hukou* status.

Age was included as a set of dummy variables (14-19, 20-25, 26-31, 32-40, and 41-60) in the hazard-rate analysis to distinguish between age and period effects on the likelihood of *hukou* conversion. We made the intervals shorter at the beginning of the career because we expected the most rapid change then. We restricted the hazard-rate analysis to those younger than retirement age: 60 for men and 55 for women. Table 1 presents descriptive statistics for all these variables.

Given the sample design, respondents were selected from households with different numbers of adults; moreover, the current urban and rural populations were sampled at different rates. Thus, to render our data representative of the adult population of China, we applied a case weight, the inverse of the probability that an individual was selected, both for the descriptive statistics and for the model estimation. Except when otherwise indicated, all analyses were conducted using Stata 7.0's estimation commands, computing robust standard errors to correct for clustering in the sample (StataCorp 2001).

THE IMPACT OF HUKOU STATUS ON LIFE CHANCES

Although it is not surprising that rural origin leads to disadvantages in socioeconomic achievement—this is true of many societies, whether socialist or capitalist, developed or developing—our claim here is that rural *hukou* status imposed additional limitations on favorable life chances in China, which cannot be attributed solely to the effect of place. In this section, we examine the effects of *hukou* origin on access to education and political credentials, two significant facilitators of social mobility in state socialist China (Walder, Li, and Treiman 2000).

Hukou Origin and Educational Attainment

Admission to specialized secondary schools and tertiary institutions in China is based primarily on competitive examinations. Thus, education at this level is, in principle, equally available to all Chinese citizens, depending only on their individual merit. However, "equal" opportunity in education has always produced dramatically unequal outcomes between rural and urban *hukou* holders. Rural students are, in practice, severely disadvantaged on several counts. First, the quality of rural primary schools tends to be inferior to that of urban schools (Lin 1992), which means that rural students fare more poorly on entrance examinations than do urban students (Smerling 1979). Second, schools beyond the primary level tend to be located in urban areas (Hannum 1999; Lin 1992), which means that rural students must move away from home to continue their schooling. Third, secondary and tertiary institutions sometimes require higher scores from nonlocal applicants than from local applicants as a condition for admission (Chan and Zhang 1999). For these reasons, rural students are less likely to enter (Hannum 1999; and are more likely to drop out of secondary and tertiary institutions (Knight and Shi 1996:111) than are urban students.

sis, by <i>Hukou</i> Origi	n, Chinese Adults	Aged 20–69 in 1996	(Weighted Data)
Variable	Overall <i>N</i> = 6,081	Rural Origins N = 4,980	Urban Origins N = 1,101
Dichotomous Variables (percentages)			
Education			
Junior high school or lower	84.5	90.0	59.9
Senior high school	7.6	5.6	16.7
Vocational school	4.6	2.8	12.6
College or higher	3.3	1.7	10.8
Party member	9.3	7.7	16.8
Gender (Male = 1)	51.6	51.5	52.2
Military experience	0.6	0.4	1.2
Urban <i>hukou</i> origin	18.1		
Place of residence at age 14			
Village	79.0	94.8	7.8
Township	5.0	2.5	16.0
County seat	3.7	1.1	15.7
County-level city	2.6	0.7	11.3
Prefecture city	5.3	0.5	26.9
Provincial capital	3.0	0.3	15.1
Directly administered city	1.5	0.2	7.3
Parent a Party member ^a	14.1	11.3	27.1
Father in state work unit	21.2	8.7	52.5
Birth cohort			
1927–1936	11.6	11.2	13.4
1937–1946	16.7	16.9	15.9
1947–1956	25.0	25.9	21.2
1957–1966	23.2	23.1	24.1
1967–1976	23.4	23.0	25.5
Continuous Variables (means)			
Years of schooling	6.4	5.8	9.2
2	(4.1)	(4.0)	(3.7)
Parental occupation status ^b	23.9	20.5	45.3
*	(16.1)	(12.4)	(20.0)
Parental years of schooling ^c	3.2	2.7	5.8
	(3.8)	(3.3)	(4.8)

Table 1. Percentages, Means, and Standard Deviations for Variables Used in the Analy-

^aScored 1 if either parent is a Party member and 0 otherwise.

^bWhen the respondent was aged 14. ISEI score of the parent with the highest occupational status (Ganzeboom et al. 1992).

^cYears of schooling of the parent with the highest years of schooling.

As Table 1 shows, as of 1996, Chinese adults from rural origins averaged only 5.8 years of schooling, compared with 9.2 years for Chinese adults from urban origins. Since education facilitates the conversion of hukou status, the effect of hukou at age 14 on educational attainment is of particular interest to us. To assess this effect, we present in

neuconora neglosi allori ana ocolar osi allifoation in onina	Household	Registration	and Social	Stratification	in China
--	-----------	--------------	------------	----------------	----------

	Mo	odel 1	Mo	Model 2	
Independent Variables	Ь	Robust SE	Ь	Robust SE	
Urban <i>Hukou</i> at Age 14	2.054	0.192	0.615 ^d	0.205	
Parental Schooling	0.225	0.034	0.215 ^e	0.034	
Parental ISEI/10	0.294	0.049	0.272	0.048	
Male	1.922	0.154	1.940	0.154	
Birth Cohort ^b					
1937–1946	1.891	0.230	1.889	0.228	
1947–1956	2.528	0.225	2.483	0.226	
1957–1966	4.215	0.222	4.206	0.222	
1967–1976	3.711	0.350	3.714	0.350	
Place of Residence at Age 14 ^c					
Town			0.746	0.326	
County seat	_		1.817	0.385	
County-level city			1.761	0.323	
Prefecture city			1.704	0.270	
Provincial capital			2.171	0.301	
Directly administered city			2.646	0.315	
Constant	0.792	0.229	0.800	0.227	
R^2	0.	356	0.	365	
Standard Error of Estimates	3.	323	3.	300	
Ν	5,	789	5,	789	

Table 2.	Coefficients for Models of Educational Attainment, Chinese Adults From Rura
	and Urban Origins, 1996 ^a

371

^aExcept where noted, coefficients are significant at or beyond the .001 level.

^bThe omitted category is 1927–1936.

^cThe omitted category is village.

 ^{d}p value is .003.

 ^{e}p value is .024.

Table 2 ordinary least-squares regression models predicting years of schooling completed from *hukou* status at age 14, parental education, parental occupational status when the respondent was aged 14, gender, 10-year birth cohort, and respondent's place of residence at age 14.

Model 1 of Table 2 omits the set of dummy variables for place of residence at age 14. All net effects are as expected, and all are substantial. First, each year of parental schooling increases the expected years of schooling of respondents by nearly a quarter of a year. Similarly, each 10 points on the occupational status scale returns a net increase of about three tenths of a year of schooling. These findings are consistent with what is known about educational attainment throughout the world—educational attainment is substantially correlated with parental socioeconomic status net of other factors (see, e.g., Shavit and Blossfeld 1993; Treiman and Yip 1989). Second, it is well known that in China, men have greater educational opportunities than do women (Hannum and Xie 1994). Our data

show that men average two more years of schooling than do women. Third, in common with most other nations, educational opportunities in China have expanded throughout the twentieth century (Deng and Treiman 1997). Our data indicate that younger cohorts have more schooling than do older cohorts. People who were born in 1957 or later averaged four more years of schooling than do people who were born prior to 1937, net of other factors (moreover, the coefficient for the youngest cohort, aged 20–29, is probably underestimated because many of them were still in school as of 1996).

Central to our concern here, having an urban *hukou* at age 14 results in a huge advantage in schooling. That is, respondents who were lucky enough to have been born into families holding an urban *hukou* averaged two more years of schooling than did those from rural origins with the same parental education, parental occupation, gender, and birth cohort.

The place where people grew up has a significant impact on educational attainment in China (Hannum 1999) as elsewhere in developing countries (Buchmann and Hannum 2001). Since *hukou* status and place of residence at 14 are highly correlated (see Table 1), the obvious question is whether rural *hukou* status creates an additional disadvantage independent of the well-known disadvantage of rural residence on educational outcomes noted earlier. To disentangle the institutional effect of *hukou* status from the spatial effect of residence on educational attainment, we estimated Model 2 in Table 2, with place of residence at age 14 as an additional control.

As expected, place of residence matters a great deal in determining educational attainment. Children who grew up in a directly administered city (Beijing, Shanghai, and Tianjin) averaged 2.6 more years of schooling than children who grew up in a village, net of other factors. The net advantage in schooling for those who grew up in other cities ranged from about 1.7 to 2.2 years, while town residents enjoyed an educational advantage of only about three fourths of a year relative to villagers. This spatial hierarchy with respect to education appears to be a clear reflection of China's redistributive policy in allocating resources under state socialism (Zhou, Moen, and Tuma 1998), strengthened by governmental restrictions on migration.

Regardless of where they grew up, people with rural *hukou* are educationally handicapped both by the inferior quality and limited number of available schools and by explicitly discriminatory state policy. Schools, especially high-quality schools, are generally concentrated in cities and are not readily accessible to students who lack a local urban *hukou*. Moreover, educational admission policies often discriminate against nonlocal students. Students with local urban *hukou* are usually favored in admission to vocational/technical schools and community colleges—the key to *hukou* mobility. By setting admission standards higher for nonlocal students, these institutions further limited the rate of *hukou* conversion, since rural students were virtually always nonlocal because most secondary and tertiary institutions were located in urban areas. The result is that net of size of place at age 14, as well as other factors, children who lack urban *hukou* status suffer an educational disadvantage—more than half a year of schooling.

Hukou Origin and Attainment of Party Membership

The chance of acquiring political credentials is limited for people of rural *hukou* origin as well. After the founding of the People's Republic, the CCP focused more actively on recruiting members and building up grassroots organizations in urban than in rural areas. As a result, most people who lived in rural areas, but especially peasants, had little chance to join the CCP. To examine rural-urban differences in access to Party membership, we estimated binomial logistic regression models of the odds of current Party membership. In addition to *hukou* at age 14, we included as control variables parental Party membership, military experience, gender, and birth cohort in Model 1 and added place of residence at age 14 in Model 2.

Household Registration and Social Stratification in China

Party Memb	ership, Chi	inese Adults, I	.996*			
		Model 1			Model 2	
Variable	в	Robust SE	e ^b	Ь	Robust SE	e ^b
Urban <i>Hukou</i> at Age 14	0.902	0.115	2.464	0.484 ^e	0.254	1.622
Parent a Party Member	0.863	0.123	2.370	0.845	0.125	2.327
Military Experience	2.903	0.534	18.230	2.886	0.529	17.920
Male	1.402	0.115	4.061	1.410	0.116	4.098
Birth Cohort ^b						
1937–1946	-0.345^{d}	0.158	0.708	-0.343°	0.159	0.710
1947–1956	-0.658	0.166	0.518	-0.665	0.166	0.514
1957–1966	-1.569	0.165	0.208	-1.576	0.167	0.207
1967–1976	-2.754	0.250	0.064	-2.775	0.251	0.062
Place of Residence at Age 14	c					
Township				0.260 ^e	0.304	1.297
County seat				0.648°	0.307	1.912
County-level city	_	_		0.456°	0.411	1.578
Prefecture city	_	_		0.466 ^e	0.285	1.594
Provincial capital				0.493 ^e	0.267	1.637
Directly administered city	- <u> </u>	_		0.550 ^e	0.261	1.734
Constant	-2.649	0.155		-2.671	0.156	

Table 3.Coefficients for a Binomial Logistic Regression Model of the Determinants of Communist
Party Membership, Chinese Adults, 1996^a

373

^aExcept where noted, coefficients are significant at or beyond the .001 level.

^bThe omitted category is 1927–1936.

°The omitted category is village.

 ^{d}p value is 0.029.

^ep values are .057, .031, .391, .035, .266, .101, .065, and .035.

Table 3 shows the estimated coefficients. In Model 1, as expected, *hukou* origin has a substantial net impact on the odds of becoming a CCP member; the odds for those of urban origin are about 22 times the odds for those of rural origin. In addition, the net odds that children of Party members become Party members are also more than twice the odds for the children of nonmembers, and the odds for men are about four times the odds for upward mobility, the odds that PLA members subsequently become CCP members are far higher than for others—about 18 times as great. Finally, the odds of becoming a Party member systematically decline for successive cohorts, probably because of a combination of an age effect (people are invited to join the Party at various ages) and a cohort effect (Party membership has become less popular as a means to social mobility since the beginning of the reform era). From the analysis reported in Table 3, we cannot distinguish between these two possibilities.

In Model 2 of Table 3, we included place of residence as a set of dummy variables. The institutional effect of origin *hukou* status persists: the odds of becoming a Party member for those of urban-origin status are more than 1.5 times the odds for those of rural-origin status. It may well be that this finding reflects the superior education of those with

urban *hukou* shown in Table 2. But it also could reflect the propensity of the CCP to focus its recruiting efforts on the permanent urban population, since most recruitment to the Party takes place in schools, youth organizations, and work organizations (*danwei*).

Overall, the effect of residence at age 14 on the odds of joining the CCP is not statistically significant ($\chi^2[6] = 6.5$; p = .37). However, it is of interest to note that the odds of joining the Party are significantly higher for those who grew up in political centers—county seats, provincial capitals, and the directly administered cities—than for those who grew up in villages, but this pattern is less evident for those who grew up in other areas (the coefficients are all positive, but do not reach the same levels of statistical significance).

To recapitulate, people of rural and urban origins differ substantially in their access to educational and political opportunities that may help them move upward in the socialist hierarchy. Net of family background, residence, and other demographic attributes, people of rural *hukou* origin had inferior life chances—access to education and CCP membership—than did those who were lucky enough to have been born into families with urban status.

GAINING URBAN STATUS: A CROSS-SECTIONAL ANALYSIS

Given that educational and political credentials serve as important channels for rural-tourban status mobility but that access to these credentials is severely restricted for those from rural origins, how likely is it that rural people can convert their rural *hukou* to urban *hukou*, and what factors are most important? To determine this likelihood and specifically to test the hypotheses proposed earlier, we restricted our analysis to the rural-origin population with complete data (N = 4,127),⁵ and estimated models of the odds of attaining an urban *hukou*.

Six independent variables that are pertinent to these hypotheses are included in the model: education, Party membership, gender, parental Party membership, and whether the father was employed in a state work unit when the respondent was aged 14. In addition, five 10-year birth cohorts are included as controls. Descriptive statistics for both the dependent and independent variables are presented in column 2 of Table 1.

Table 4 presents the coefficients for two binomial logistic regression models of *hukou* mobility. Model 1 estimates the odds of acquiring an urban *hukou* as a function of the variables that are thought to affect the odds directly: educational level, Party membership, and military experience. Model 2 adds the variables that are thought to affect the odds of *hukou* mobility indirectly: gender and family background, plus birth cohort. The results from both Model 1 and Model 2 are consistent with five of our hypotheses—all but our expectation that men are more likely than women to gain urban *hukou* status.

First, as expected, given regulations that normally grant urban *hukou* status upon enrollment in vocational/specialized schools or tertiary institutions, the effects of these levels of education are strong—although much stronger for tertiary education than for vocational education (the odds multiplier for vocational/specialized education is more than 8 for Model 1 and nearly 11 for Model 2, and the corresponding odds multipliers for tertiary education are 46 and 84). This finding probably reflects the fact that in the Chinese *hukou* system, but unfortunately not in our data (and, oddly, not in most Chinese

^{5.} As we noted earlier, some of those from rural origins are lucky enough to gain urban *hukou* status because of the incorporation of their villages into towns or cities (Chan 1994:77). Since these cases are not pertinent to our analysis of the individual factors that promote change in *hukou* status, they should be excluded. Although we do not have direct information on "passive" *hukou* change, we can approximate it by excluding the 216 people who changed *hukou* since age 14 without changing their place of residence. As it happens, whether or not these cases are excluded has little impact on the results. Still, we report the coefficients for estimates that omit the 216 cases.

Household Registra	ation and Social	Stratification in	n China
--------------------	------------------	-------------------	---------

1996 ($N = 4$,	127) ^a					
		Model 1			Model 2 ^c	
Variable	Ь	Robust SE	e ^b	в	Robust SE	e ^b
Education (≤ junior high school omitted)						
Senior high school	0.904	0.202	2.471	1.407	0.222	4.083
Vocational school	2.115	0.259	8.294	2.369	0.253	10.690
College or higher	3.838	0.435	46.460	4.428	0.477	83.800
Party Membership	1.438	0.155	4.212	1.320	0.173	3.744
Military Experience	1.589 ^b	0.694	4.900	1.908	0.656	6.737
Control Variables						
Male				-0.766	0.131	0.465
Parental Party membership)			0.494	0.166	1.639
Father in a state work unit				0.871	0.138	2.389
Birth cohort (1927–1936 omitted)						
1937–1946				-0.809	0.151	0.445
1947–1956				-1.586	0.193	0.205
1957–1966				-1.953	0.214	0.142
1967–1976				-2.193	0.273	0.112
Constant	-2.643	0.199		-2.102	0.267	

Table 4.Coefficients for Binomial Logistic Regression Models of Hukou Change, Chinese Adults,
1996 (N = 4,127)^a

375

^aPeople who changed their *hukou* without changing their residence (N = 216) were excluded from this analysis because they are assumed to have acquired urban *hukou* status via the incorporation of their village into a town or city.

^bSignificant at the .022 level; all other coefficients in the column are significant at beyond the .001 level.

^cAll coefficients are significant at or beyond the .004 level.

statistical compilations either), a distinction is made between a vocational and a specialized technical school, with only the latter routinely leading to urban *hukou* status. Also, even though people who complete academic senior high school but fail to enter tertiary institutions are supposed to return to their rural villages, the odds of such graduates eventually attaining an urban *hukou* are about 2.5 times the odds for those with less education in Model 1 and more than four times in Model 2.

Second, both Party membership and military service sharply increase the odds of obtaining urban registration. Net of other factors, the odds that Party members attain urban status are more than four times the odds for nonmembers in Model 1 and a little less than four times in Model 2, and the odds for those with military experience are nearly five times the odds for those who lack military experience in Model 1 and nearly seven times in Model 2. Although we posited a process in which young people join the PLA and, while enlisted, join the CCP, thereby improving their odds of achieving urban status, it is clear from the analysis that PLA experience *independently* enhances the likelihood of achieving urban status, probably through improved chances of being assigned a job in an urban area upon demobilization.

Third, contrary to our expectation, men are less likely than women to obtain urban status net of other factors; the odds multiplier in Model 2 is 0.46. As we have shown,

women are disadvantaged in obtaining education and Party membership, crucial facilitators of mobility from rural to urban *hukou* status. They are also far less likely to join the PLA (in our data no women had military experience). Thus, rural-origin women are less likely than rural-origin men to attain urban registration via these mechanisms. However, it turns out that rural-origin women are about as likely as rural-origin men to obtain an urban *hukou*—10.8% of women, compared to 11.8% of men, did so—and about twice as likely to obtain an urban *hukou* net of education, Party membership, and military service.⁶ Perhaps women are more likely to gain urban status through an alternative channel, such as marriage, even though marriage to a permanent urban resident does not create an automatic entitlement to an urban *hukou*. A separate analysis (not reported here) showed that married women are more likely to gain urban *hukou* status than are unmarried women, unmarried men, or married men, net of other factors. But this evidence is hardly conclusive in the absence of data on spouse's *hukou*, which unfortunately was not included in the survey.

Fourth, parental Party membership during childhood increases the odds that ruralorigin respondents obtain urban status, net of all other factors (the odds multiplier is 1.6). Thus, while parents' political credentials *indirectly* influence children's chances of obtaining urban status through their positive influence on children to become Party members, join the military, and enroll in higher education, they also *directly* influence children's chances, presumably because they permit parents to exploit special opportunities for their children, such as the recruitment of rural youths for jobs that carry urban status.

Finally, the 9% of rural-origin people whose fathers were employed in state enterprises when the respondents were growing up had substantially greater odds of acquiring urban status, net of other factors (the odds multiplier is 2.4).

We included one set of variables in the analysis for which we did not develop explicit hypotheses—birth cohort. It turns out, however, that the net odds of gaining urban *hukou* status systematically decline for successive 10-year birth cohorts, albeit with the largest decline between the oldest and the next-oldest cohort. The result is that net of other factors, the odds that our youngest respondents gained an urban *hukou* by the time of the survey are only about 11% as large as the corresponding odds for the oldest cohort. The interpretation of this result is somewhat problematic. Although we are inclined to interpret the result as a period effect—a decline over time in the odds of converting a rural to an urban *hukou* as governmental policies became more stringent—it could be argued that what we observed reflects continuing opportunities to obtain an urban *hukou* over the life course and thus a conversion rate that increases with age. To settle this issue definitively would require a way to disentangle the effects of age and period, which we accomplished via a discrete-time hazard-rate (event-history) analysis.

TEMPORAL TRENDS IN *HUKOU* MOBILITY RATES: AN EVENT-HISTORY ANALYSIS

A discrete-time hazard-rate analysis of the determinants of *hukou* conversion in the ruralorigin population allowed us both to pin down the temporal order of *hukou* conversion relative to education and CCP membership and to adjudicate between age-effect and period-effect interpretations of the observed negative relationship between year of birth and the rate of *hukou* conversion. This analysis was complicated by the fact that the 1996 survey did not collect information on the timing of *hukou* conversion—that is, no question was asked about the year in which the respondents acquired urban status. We imputed

^{6.} In an analysis of 1990 census data for Hubei Province, Goldstein, Liang, and Goldstein (2000:225, table 12.5) presented similar evidence: rural-origin men are slightly more likely than rural-origin women to achieve urban *hukou* status, but net of education, occupational status, age, and residence, the odds of *hukou* mobility are significantly lower for men than for women. Goldstein et al. were also unable to offer an explanation.

the year of *hukou* conversion in two ways, taking into account regulations regarding *hukou* conversion and using information in the survey on the respondents' educational and occupational histories, plus limited information on residential mobility.

Our first imputation method was to use the year that successful converters moved to their current place of residence. This strategy has two potential problems. First, the date of *hukou* conversion could be overstated for those who changed their locale (village, town, or city) more than once since age 14. However, because residential mobility has been extremely limited in China since the 1950s, we can reasonably assume that most successful *hukou* converters still live in the city or town in which they obtained urban residence. The exception is college graduates, who generally obtain urban status upon matriculation but may relocate after graduation (discussed below).

The second issue is that we have no basis for computing the year of *hukou* conversion for those who changed their *hukou* without changing their city, town, or village of residence. However, this is actually not a problem because we wanted to exclude these people anyway, as we did in the analysis reported in Table 4, since it is probable that most of them gained urban status by the incorporation of their village into a town or city, rather than through their own effort.

Our second method of imputing the year of *hukou* conversion was possible only for college graduates. For them, we used the survey's data on educational history and imputed the year of *hukou* conversion as the year of college admission. According to the Chinese college-admission policy, a student's *hukou* is transferred from his or her hometown to the college upon admission. After graduation, the *hukou* is again transferred to the locale of the work unit to which she or he is assigned. However, even if graduates fail to find jobs, their urban status is maintained, and it becomes the obligation of the local urban authorities from their place or district of origin to find jobs for them.

Following these procedures, we were able to impute the year of *hukou* change for all people who changed both their *hukou* and their place of residence between age 14 and the date of the survey. Although the year of imputed change ranges from 1939 to 1996, we omitted those who moved into urban areas prior to 1955 because before then, there was essentially no governmental regulation on migration from rural to urban areas; those who resided in urban areas in 1955, when the *hukou* system was established, were automatically granted urban status. We thus restricted our analysis to the years between 1955 and 1996 and to those who were "at risk" of acquiring urban status in each year starting with 1955. People were regarded as "at risk" if they had not yet acquired urban status and had not yet reached retirement age (60 for men and 55 for women).

With information on the timing of *hukou* change, as well as the timing of admission to the CCP and achievement of particular levels of education, a discrete-time hazard-rate model of the likelihood of *hukou* conversion at each year of risk can be estimated via conventional procedures for estimating binomial logit models (Allison 1984). The structure of the input data, however, differs from that of a conventional logit model. While the unit of analysis in conventional logit models is the respondent, discrete-time hazard-rate models are estimated by constructing a data set of person-years at risk. In our analysis, each person with a rural *hukou* at age 14 (or rural residence in 1954 if born prior to 1941) was initially exposed to the risk of changing *hukou* either in 1955, if born prior to 1941, or in the year after he or she reached age 14. Then for each subsequent year, if the person acquired an urban *hukou* she or he was dropped from the data set for the following years. In addition, people who did not obtain an urban *hukou* by retirement age (60 for men and 55 for women) were dropped from the data set for that and all subsequent ages.

Figure 1 plots the hazard rate of *hukou* conversion (the percentage gaining an urban *hukou* among those at risk) between 1955 and 1996 without controlling for any covariates. Over the 50 years since the *hukou* system was established, the trend of social mobility from rural to urban status has generally been consistent with the historical evolution



Figure 1. Discrete-Time Hazard Rate of Rural-to-Urban Hukou Conversion: 1955–1996



of the *hukou* system. In the second half of the 1950s, when the *hukou* system was first being established, the rate of *hukou* conversion was relatively high, approaching 4%. In 1959, the conversion rate dropped precipitously as a result of governmental intervention, and by the early 1960s, when an extremely restrictive policy was fully implemented, the conversion rate fell to less than 1%.

The dependent variable is whether a respondent changed *hukou* status in the year to which an observation refers. The independent variables include all those used in the analysis reported in Table 4, except that the 10-year birth cohorts are replaced by a set of dummy variables to model age effects, and a set of dummy variables is included to model period effects (see the discussion in the Variables section). However, here education, Party membership, and military experience are treated as time-varying covariates; that is, they are set at their values for each year at risk. Thus, for each year, education is represented by the highest level of education achieved by that year. However, academic and vocational high school education are regarded as achieved by graduation because, except for the subset of vocational/specialized high school students who were enrolled in specialized schools, high school matriculation did not automatically result in *hukou* conversion. Tertiary education, by contrast, is regarded as achieved in the year of matriculation, which automatically resulted in *hukou* conversion. Military service is treated the same way as high school: respondents are regarded as having had military service as of the year they left the military, since the main advantage of military service is in increasing the chance of being assigned an urban job after service is completed. Finally, respondents are regarded as CCP members as of the year they joined the Party. Whether at least one parent was a member of the CCP and whether the father was employed in a state work unit are treated as time-constant variables and refer to when the respondent was aged 14.

Household Registration and	I Social Stratification in C	hina
----------------------------	------------------------------	------

1955–1996ª						
		Model 1			Model 2	
Variable	Ь	Robust SE	e ^b	Ь	Robust SE	e ^b
Time-Dependent Covariates Education (≤ junior high school omitted)						
Senior high school	1.679	0.188	5.361	1.732	0.192	5.654
Vocational school	2.158	0.250	8.654	2.178	0.239	8.826
College or higher	4.569	0.425	96.400	4.462	0.546	86.400
Party membership	1.209	0.157	3.489	1.490	0.144	4.436
Military experience	0.855 ^b	0.612	2.351	0.982°	0.790	2.669
Time-Constant Covariates Male				-0.434	0.113	0.648
Parental Party membershi	р			0.218 ^c	0.163	1.243
Father in a state work uni	t			1.320	0.200	3.743
Period effect (1955–1958 omitted) 1959–1965				-1.364	0.198	0.256
1966-1976				-1.960	0.209	0.141
1977-1986				-1.866	0.243	0.155
1987-1996				-2.155	0.277	0.116
Age (14–19 omitted)						
20–25				0.561	0.143	1.752
26–31				-0.041°	0.174	0.960
32-40				-0.093°	0.206	0.911
41-60				-0.076°	0.228	0.927
Constant	-5.993	0.198		-4.322	0.222	

Table 5. Discrete-Time Logit Models for Obtaining Urban Status on Selected Variables, 1955–1996^a

^aPeople who changed their *hukou* without changing their residence (N = 216) were excluded from this analysis because they are assumed to have acquired urban *hukou* status via the incorporation of their village into a town or city.

^bSignificant at the .163 level; all other coefficients in the column are significant at beyond the .0005 level.

^cWhere marked, *p* values, going down the column, are .214, .182, .816, .651, and .739. All other coefficients are significant at beyond the .0005 level.

Table 5 presents logits and odds multipliers for a model of the likelihood of *hukou* conversion for those at risk in each year from 1955 to 1996. As before, Model 1 includes only the variables that are thought to facilitate *hukou* conversion directly—education, CCP membership, and military experience—while Model 2 includes as well the variables that are thought to have an indirect effect, plus the control variables. With two exceptions, these results are generally consistent with those reported in Table 4. Military service proves not to have a significant effect on *hukou* conversion in the hazard-rate model, although the odds more than double relative to those who lack military service. The large standard errors associated with the coefficients for military service probably reflect both the fact that it is a rare event—few people join the PLA—and that the advantage of military service pertains only to the first job after leaving military service. Those who are unsuccessful in

getting urban jobs when they leave the PLA have no further way of taking advantage of their veteran status. Parental Party membership also proves to be nonsignificant in the hazard-rate models, perhaps because it, too, is helpful only at the beginning of the career.

Otherwise, the corresponding variables appear to behave in a similar way whether *hukou* conversion is treated as a single outcome and no account is taken of censoring, as in Table 4, or whether the odds are computed year by year for those who are still at risk, as in Table 5. If anything, the effects are stronger in the hazard-rate version: as in most other societies, education is the primary vehicle for upward mobility, in this case from rural to urban *hukou* status, and, as in most communist societies, political credentials in the form of Party membership play a strong independent role in enhancing upward mobility; finally, having a father who is employed in a state-owned work unit creates an even stronger advantage in the hazard-rate analysis in Table 5 than in the cross-sectional analysis in Table 4. The fact that the effects of education and CCP membership hold up or become even stronger in the hazard-rate analysis strongly suggests that the results in Table 4 are not subject to much endogeneity bias. Conversely, the similarity in the results provides assurance that we have not gone far wrong in our imputation of the year of *hukou* conversion. Together, the two complementary analyses suggest that our key results are robust.

A distinctive feature of the hazard-rate analysis is that we are able to distinguish period effects from age effects through the introduction of a set of dummy variables for each factor. The presence of both sets of variables in a single model greatly clarifies the interpretation of each set. The results for period strikingly mirror those in Figure 1—although established in 1955, the *hukou* system did not begin to operate in an effective way until about 1959, at the end of the disastrous Great Leap Forward. At that point, *hukou* conversion became much more difficult—the net odds of conversion dropping to about a quarter of what they were in the first period and then dropping again to about 15% of the odds for the first period. Despite the increasing tolerance of informal rural-to-urban migrants in the reform era (1997–1986 and 1987–1996), the state has in no way relaxed its stringent requirements for obtaining formal urban *hukou* status and has, if anything, tightened them. It is interesting to note that despite the vicissitudes of state policy, including especially the politicization of everyday life during the Cultural Revolution, there appear to be no significant differences in the odds of *hukou* conversion from 1955 on.

Finally, the effect of age is also now clear. It is not surprising that *hukou* conversion is a young person's game: the odds of *hukou* conversion peak at ages 20–25, when they are nearly twice as large as for ages 14–19 and about twice as large as the odds for the three older age categories.

SUMMARY AND CONCLUSIONS

In this article, we have examined the determinants of mobility from rural to urban *hukou* status, a form of government-endorsed mobility, first by estimating a binomial logit model of whether *hukou* conversion had been achieved by the time of the survey and then by estimating a discrete-time hazard-rate model. Our hypotheses regarding the role of educational and political credentials were generally supported in both analyses and held up when various controls were introduced. Education (particularly specialized secondary or tertiary education) strongly increases the odds that those from rural origins obtain urban status. CCP membership also substantially increases the odds of *hukou* conversion, although not as much as does education. The results for military experience are mixed. The cross-sectional model shows a strong effect of military experience, but the hazard-rate model does not, perhaps because military experience is directly effective only at the time when that service is completed, enhancing the chance of being assigned to an urban job. All in all, these three credentials—education, Party membership, and military service—facilitate *hukou* mobility under the socialist regime. However, access

to these resources is constrained by family background, including *hukou* origin. Even when size of place of residence at age 14 is controlled, rural *hukou* status significantly decreases educational attainment and the chance of gaining Party membership.

In addition, rural respondents whose fathers work in state work units have a substantial advantage in gaining urban status, presumably because of enhanced information and special opportunities that can be exploited by the fathers for the benefit of their children. The results regarding the effect of parental Party membership are mixed. The crosssectional model shows a strong effect of parental Party membership, but the hazard-rate model does not.

Among the hypotheses we proposed, the only one that was clearly contradicted by our findings was our expectation that net of other factors, rural-origin men would be more successful in converting their *hukou* status than would rural-origin women. It turns out that women are more likely than men to convert their *hukou* when education, Party membership, and military experience are controlled. We suspect that the exploitation of marriage as an alternative channel of gaining urban status is more available to rural women than to rural men (Goldstein et al. 2000).

Finally, we have shown both strong period effects—the severe tightening of the *hukou* system after the Great Leap Forward and the subsequent maintenance of a low rate of *hukou* conversion through 1996, the date of the survey—and strong age effects, with successful *hukou* conversion peaking between ages 20 and 24.

These findings have important implications for studying both rural-urban migration and social mobility in state socialist China, a nation with a strikingly high degree of segmentation of the urban and rural populations. For migration studies, this article has called attention to a form of government-sponsored rural-urban migration under the Chinese socialist regime that was put in place long before the emergence of massive (informal) migration driven by the market reform. These two migration regimes coexist and interact with each other, and each must be understood with reference to the other. The literature in this field, however, is overwhelmed by the latter, with little attention paid to the former. Although it is true that peasant migrants have experienced substantial socioeconomic mobility compared with their peers who have stayed in villages, they continue to be highly socially and spatially segregated from permanent urban residents and are far from achieving socioeconomic parity, precisely because their distinct *rural* status precludes access to the kind of housing, health care, jobs, and education for their children that permanent residents enjoy. People of rural origin who have experienced *hukou* mobility, on the other hand, enjoy full urban entitlements and are highly advantaged relative to the average permanent urban resident as a consequence of their strong positive selection on the basis of education and political loyalty (Wu 2001). A direct comparison and contrast between the two migration regimes would yield insights into the role of state and market, selection mechanisms, and their social consequences.

For stratification and mobility studies, the very fact that urban *hukou* status is so difficult to achieve for those of rural origin and is so selective of the brightest of the rural population provides a possible explanation for the weak association between parents' and children's occupational status in urban areas. The high rate of intergenerational mobility and the weak zero-order association between parent's and offspring's occupational status that were found in early studies of social mobility and status attainment in urban China (Blau and Ruan 1990; Lin and Bian 1991; Whyte and Parish 1984) led some scholars to claim that China was an exceptionally "open" society in which state egalitarian policies effectively eliminated inherited class privileges. An important implication of our analysis of *hukou* mobility is that research on status attainment and social mobility that is based on urban samples (or rural samples, although such research is uncommon) makes little sense, since it is likely to be subject to severe selection bias. The permanent urban population includes both those who were born into urban families (or whose villages were

incorporated into towns and cities) and those from peasant origins who acquired urban status through their own efforts and hence achieved extremely high-status urban occupations. The extreme upward mobility of the latter group clearly has the effect of reducing the intergenerational occupational-status correlation.

Although China is socially divided by the *hukou* system, our intellectual understanding and empirical analysis of Chinese society should not be subject to the same divide. Analyses of truly national probability samples, with rural and urban components pooled together, are a necessary condition for valid findings regarding the extent of social mobility and "societal openness." Future research on both spatial and social mobility in China would do well to attend to the *hukou* system as a central stratifying agent in contemporary Chinese society.

REFERENCES

Allison, P. D. 1984. Event History Analysis. Beverly Hills, CA: Sage.

- Bian, Y. 1994. Work and Inequality in Urban China. Albany: State University of New York Press.
- Blau, P.M. and D. Ruan. 1990. "Inequality of Opportunity in Urban China and America." Research in Stratification and Mobility 9:3–32.
- Buchmann, C. and E. Hannum. 2001. "Education and Stratification in Developing Countries: A Review of Theories and Research." *Annual Review of Sociology* 27:77–102.
- Chan, K.W. 1994. Cities With Invisible Walls. Hong Kong: Oxford University Press.
- Chan, K.W. and L. Zhang. 1999. "The Hukou System and Rural-Urban Migration in China: Processes and Changes." China Quarterly 160:818–55.
- Deng, Z. and D.J. Treiman. 1997. "The Impact of the Cultural Revolution on Trends in Educational Attainment in the People's Republic of China." *American Journal of Sociology* 103:391–428.
- Ganzeboom, H.B.G., P. de Graaf, and D.J. Treiman. 1992. "An International Scale of Occupational Status." Social Science Research 21:1–56.
- Goldstein, S., Z. Liang, and A. Goldstein. 2000. "Migration, Gender, and Labor Force in Hubei Province, 1985–1990." Pp. 214–30 in *Re-drawing Boundaries: Work, Households, and Gender* in China, edited by B. Entwisle and G.E. Henderson. Berkeley: University of California Press.
- Hannum, E. 1999. "Political Change and the Urban-Rural Gap in Basic Education in China, 1949– 1990." Comparative Education Review 43:193–211.
- Hannum, E. and Y. Xie. 1994. "Trends in Educational Gender Inequality in China: 1949–1985." Research in Social Stratification and Social Mobility 13:73–98.
- International Labour Office. 1969. International Standard Classification of Occupations. Rev. ed. Geneva: International Labour Office.
- Kasarda, J.D. and E.M. Crenshaw. 1991. "Third World Urbanization: Dimensions, Theories, and Determinants." Annual Review of Sociology 17:467–501.
- Knight, J. and L. Shi. 1996. "Educational Attainment and the Rural-Urban Divide in China." Oxford Bulletin of Economics and Statistics 58:83–117.

Lee, E.S. 1966. "A Theory of Migration." Demography 1:47-57.

- Liang, Z. 2001. "The Age of Migration in China." *Population and Development Review* 27: 499–524.
- Liang, Z. and Z. Ma. 2003. "The Floating Population of China: New Evidence From the 2000 Population Census." Working Paper. Hong Kong: Hong Kong University of Science and Technology.
- Liang, Z. and M.J. White. 1996. "Internal Migration in China 1950–1988." *Demography* 33: 375–84.
- ——. 1997. "Market Transition, Government Policies, and Interprovincial Migration in China: 1983–1988." *Economic Development and Cultural Change* 45:321–84.
- Lin, J. 1992. "Issues of Inequality in Chinese Education." Unpublished paper, Administration and Policies Studies in Education, McGill University, Montreal. (Microfiche: ERIC, Resources in Education, ED347262.)

- Lin, J.Y. 1988. "The Household Responsibility System in China's Agricultural Reform: A Theoretical and Empirical Study." *Economic Development and Cultural Change* 36:S199–S224.
- Lin, N. 2000. "Understanding the Social Inequality System and Family and Household Dynamics in China." Pp. 284–94 in *Re-drawing Boundaries: Work, Households, and Gender in China,* edited by B. Entwisle and G.E. Henderson. Berkeley: University of California Press.
- Lin, N. and Y. Bian. 1991. "Getting Ahead in Urban China." *American Journal of Sociology* 97:657–88.
- Massey, D.S, J. Arango, G. Hugo, A. Kouaouci, A. Pellegrino, and J.E. Taylor. 1993. "Theories of International Migration: A Review and Appraisal." *Population and Development Review* 19:431–66.
- Meisner, M. 1999. *Mao's China and After: A History of the People's Republic*. 3rd ed. New York: Free Press.
- National Standards Bureau. 1986. *The Chinese Classification of Occupations*. Beijing: Standards Press of China. [In Chinese]
- Parish, W.L. and M.K. Whyte. 1978. "Collective Agricultural Organization." Pp. 30–43 in Village and Family in Contemporary China. Chicago: University of Chicago Press.
- Portes, A. and J. Böröcz. 1989. "Contemporary Immigration: Theoretical Perspectives on Its Determinants and Modes of Incorporation." *International Migration Review* 23:606–30.
- Roberts, D.K. 1997. "China's 'Tidal Wave' of Migrant Labor: What Can We Learn From Mexican Undocumented Migration to the United States?" *International Migration Review* 31:249–93.
- Shavit, Y. and H.-P. Blossfeld, eds. 1993. *Persistent Inequality: Changing Educational Attainment in Thirteen Countries*. Boulder: Westview Press.
- Smerling, L.R. 1979. "Admissions." Pp. 92–105 in *China's Schools in Flux*, edited by R.N. Montaperto and J. Henderson. White Plains, NY: M. E. Sharpe.
- Solinger, D.J. 1999. Contesting Citizenship in Urban China: Peasant Migrants, the State, and the Logic of Market. Berkeley: University of California Press.
- StataCorp. 2001. Stata Statistical Software, Release 7.0. Vol. 3. College Station, TX: StataCorp.
- State Council. 1986 [1958]. "Hukou Dengji Tiaoli" ["Regulations on Household Registration"]. Pp. 83–85 in Zhongguo Renkou Nianjian 1985 (Population Yearbook of China 1985), edited by Chinese Academy of Social Sciences. Beijing: Zhongguo Shehui Kexue Chubanshe. [In Chinese].
- Todaro, M.P. 1976. "In Search of a 'General' Framework for Migration Analysis." Pp. 15–19 in *Internal Migration in Developing Countries*. Geneva: International Labor Office.
- Treiman, D.J. 1998. *Life Histories and Social Change in Contemporary China: Provisional Codebook*. Los Angeles: UCLA Institute for Social Science Research.
- Treiman, D.J. and A.G. Walder. 1996. *Life Histories and Social Change in Contemporary China*. Distributed by the UCLA Social Science Data Archive. Available on-line at http://www.sscnet.ucla.edu/issr/da
- Treiman, D.J. and K.-B. Yip. 1989. "Educational and Occupational Attainment in 21 Countries." Pp. 373–94 in *Cross-National Research in Sociology*, edited by M.L. Kohn. Newbury Park, CA: Sage.
- Walder, A.G. 1986. Communist Neo-Traditionalism: Work and Authority in Chinese Industry. Berkeley: University of California Press.
- Walder, A.G., B. Li, and D.J. Treiman. 2000. "Politics and Life Chances in a State Socialist Regime: Dual Career Paths Into the Urban Chinese Elite, 1949–1996." *American Sociological Re*view 65:191–209.
- Wang, F., X. Zuo, and D. Ruan. 2002. "Rural Migrants in Shanghai: Living Under the Shadow of Socialism." *International Migration Review* 36:520–45.
- Whyte, M.K. and W. Parish. 1984. Urban Life in Contemporary China. Chicago: University of Chicago Press.
- Wu, X. 2001. "Institutional Structures and Social Mobility in China: 1949–1996." Unpublished Ph.D. dissertation, Department of Sociology, UCLA.

——. 2002. "Work Units and Income Inequality: The Effect of Market Transition in Urban China." *Social Forces* 80:1069–99.

Wu, X. and Y. Xie. 2003. "Does the Market Pay Off? Earnings Inequality and Returns to Education in Urban China." *American Sociological Review* 68:425–42.

Yang, X. 1993. "Household Registration, Economic Reform, and Migration." International Migration Review 27:796–818.

Zhou, X., P. Moen, and N.B. Tuma. 1998. "Educational Stratification in Urban China: 1949–1994." Sociology of Education 71:199–222.