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Inequality and Equality under Socialism: Occupational Mobility in Contemporary China

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INEQUALITY AND EQUALITY UNDER SOCIALISM: OCCUPATIONAL MOBILITY IN CONTEMPORARY CHINA

(ABTRACT)

Using data from a 1996 national probability sample of Chinese men, the effect of family background on occupational mobility in contemporary China is analyzed, with particular attention to the rural-urban institutional divide. China has an unusually high degree of mobility *into* agriculture and also, apparently, unusual "openness" in the urban population. Both patterns are explained by China's distinctive household registration system, which simultaneously fails to protect peasants from downward mobility and permits only the best educated rural men to attain urban residential status, resulting in severe sample selection bias in previous studies restricted to the *de jure* urban population.

INEQUALITY AND EQUALITY UNDER SOCIALISM: OCCUPATIONAL MOBILITY IN CONTEMPORARY CHINA

INTRODUCTION

A central concern of intergenerational occupational mobility studies is to assess the openness of the opportunity structure of a society (Erikson and Goldthorpe 1992; Featherman, Jones, and Hauser 1975; Ganzeboom, Luijkx, and Treiman 1989). Many researchers (e.g., Blau and Ruan 1990; Parish 1981) claim that China, as a socialist country, is unusually open. The socialist state eliminated private ownership of the means of production and implemented a variety of egalitarian policies that favored children from disadvantaged family origins in educational and occupational attainment, particularly during the 1966-76 Cultural Revolution (Deng and Treiman 1997). As a consequence, the argument goes, the linkage between father's and son's occupational status was weakened, resulting in an unusually low level of social reproduction.

Empirical analyses of data collected from China have lent some support to this claim. Analyzing data collected in the mid-1970s from Chinese emigrants in Hong Kong, Parish (1981, 1984) and Whyte and Parish (1984) reported that the effect of parental status on children's educational and occupational attainment, although positive in China as in other societies, declined sharply after 1966 as a result of the Cultural Revolution. Blau and Ruan (1990), in an analysis of a 1986 probability sample of the population of Tianjin, then China's third largest city, found that transmission of occupational status was much less pronounced than in the urban United States. In particular, a father's occupational status did not improve his son's achievement. Similar results have been reported by Lin and Bian (1991) for another Tianjin sample and by Lin and Xie (1988) for a Beijing sample. Hence, many scholars concluded that Maoist de-stratification

policies promoting social equality were successful (e.g., Parish 1984).

Other explanations for the high mobility rates found by most scholars of China point to the central role of urban workplaces (*danwei*) in weakening occupational inheritance. In urban China during the period studied here (ending in 1996), resources such as housing, education, and health care were allocated through workplaces (*danwei*) based on their bureaucratic positions in the socialist hierarchy (Walder 1992). Lin and Bian (1991) and Bian (1994) argue that workplace (*danwei*) affiliation, rather than occupation, was the primary determinant of socioeconomic standing in Chinese urban society. Therefore, status attainment was oriented mainly toward entering a good work unit rather than toward securing a high-status job. Their analyses of 1985 survey data for Tianjin show that, despite a weak and insignificant association between father's and son's occupational status, father's work-unit status has a direct and significant effect on son's work-unit status. Therefore, they conclude that intergenerational status transmission does exist under socialism, but in a form different from that under capitalism.

The unique role of work units in the process of urban stratification is consistent with a claim for Chinese exceptionalism. Yet the apparent lack of intergenerational occupational reproduction remains puzzling, especially given the demonstration of a modest but non-trivial association between the occupational status of fathers and sons found in virtually every other nation where the question has been studied (Erikson and Goldthorpe 1992; Ganzeboom, Luijkx and Treiman 1989; Grusky and Hauser 1984; Lipset and Bendix 1959; Treiman and Yip 1989). It remains unclear why, despite the importance of the work unit, father's occupation does not matter at all in the process of status attainment. If, as Lin and Bian (1991) and Bian (1994) claim, there is a strong link

between the work-unit types of fathers and sons, and a strong link between the type of work unit and occupation within each generation, it follows that there should be a positive association between the status of the father's and son's occupation. Occupational inheritance and occupational mobility as key aspects of intergenerational social reproduction should not be lightly dismissed but demand further careful investigation.

There are additional reasons for treating the existing results from China as inconclusive with respect to the amount of intergenerational occupational mobility. First, the data used in the analyses reviewed above are either from non-representative sample surveys or from samples limited to single cities, rendering the findings hardly generalizable to the entire nation. Second, analyses restricted to those with urban registration (the population from which urban samples are conventionally drawn in Chinese surveys) are intrinsically flawed, since rural-to-urban residential status change is an important, highly restricted, and very selective process, heavily dependent upon educational attainment and resulting in dramatic improvement in life chances (Wu 2001; Wu and Treiman 2004). Analyses limited to urban populations fail to account for the *de jure* and *de facto* segmentation of the rural and urban population and the positive sample selection of rural-to-urban official movers, those who were able to change their registration status from rural to urban.

In this paper we overcome these limitations by analyzing intergenerational occupational mobility using data from a 1996 national probability sample of adult men age 20 to 69. Combining status attainment (regression-based) models with log-multiplicative analyses of tabular data, we show how the household registration (*hukou*) system intervenes in the process of intergenerational occupational mobility and modifies

the link between father's occupation and son's occupation. We challenge the claim that socialist societies are unusually open and shed new light on the role of the distinctive policies of state socialist China in creating social inequality.

BACKGROUND: RURAL-URBAN SEGMENTATION AND CHINESE SOCIAL STRATIFICATION

Research on Chinese social stratification and mobility has been a burgeoning enterprise over the past two decades (Bian 2002). Since the economic reforms that began in 1978, the loosening of state control of everyday life and the increasing openness of China to foreign visitors, including scholars, have resulted in the wholesale adoption of sample surveys, initiated by both Chinese and foreign researchers, as primary data collection vehicles. In particular, a number of studies have been undertaken of both intra- and intergenerational mobility (e.g., Walder 1995; Walder, Li and Treiman 2000; Zhou, Tuma, and Moen 1997). With limited exceptions (e.g., Peng 1992), however, these studies have tended to treat the rural and urban sectors separately, as if they were two different nations. This makes it extremely difficult to make generalizations regarding the nation as a whole. The missing rural-urban link becomes particularly problematic when we attempt to compare China to other societies.

Rural-urban structural inequality is a prominent feature of social stratification in state socialist China. In 1955, as one of the main procedures for solidifying administrative control, the new Chinese communist government established the household registration (*hukou*) system, under which all households had to be registered in the locale where they resided and also were categorized as either "agricultural" or "non-

agricultural" (synonymously, "rural" or "urban") households (Chan and Zhang 1999, pp. 821-822). The majority of the population was bottled up in the countryside and entitled to few of the rights and benefits that the socialist state conferred on urban residents, such as permanent employment, medical insurance, housing, pensions, and educational opportunities for children (Wu and Treiman 2004). The household registration system served and serves as an important mechanism in distributing resources and determining life chances in China.

Hukou status, like other family background characteristics, can be thought of primarily as an ascriptive attribute, since it is assigned at birth on the basis of the mother's registration status (Chan and Zhang 1999). Those whose mothers have urban status automatically acquire urban status themselves, while those whose mothers have rural status must compete for urban status through very limited channels. Without permanent urban registration status, a person is not eligible for most high-status urban jobs, even if s/he was born in a city or, in the post-1978 reform era, moved there as a child or young adult.

From the inception of the registration system, rural-to-urban status conversion has been very selective. To control the growth of the urban population, the government imposed a strict quota on the conversion rate, between 1.5 and 2.0 per thousand each year, even in the reform era (Lu 2003, pp.144-146). In addition, matriculation in a

¹ Residential (*hukou*) status need not be identical to residential locale. People with agricultural status could and can live in cities, as have increasingly large numbers of migrant workers beginning in the early 1980s. Similarly, people with non-agricultural status could live in rural areas, as do agricultural technicians, civil engineers, and school teachers.

specialized secondary (*zhong zhuan*) or tertiary (*da zhuan* or *ben ke*) school carried with it entitlement to urban status, not counted in the government quota (State Council 1986 [1958]). Hence, junior high school graduates with a rural *hukou* had (and have) two strategies for securing an urban *hukou* via higher education. The first was to gain admission to a specialized secondary school (*zhong zhuan*), which conferred urban *hukou* status immediately upon admission. The second was to gain admission to an academic senior high school and then to try to get admitted to a tertiary institution. Tertiary education confers both urban *hukou* status and a high-status job; but the risk is that students from rural *hukou* origins who fail in the National College Entrance Examination must return to their home villages and work as peasants. Wu and Treiman (2004) reported that only 11 percent of respondents from rural origins had successfully converted their *hukou* status, and higher educational attainment accounted for about half of all *hukou* mobility.

The very fact that urban *hukou* status is so difficult to achieve for those from rural origins, and is so selective of the best and brightest of the rural population, has important implications for the analysis of intergenerational occupational mobility. The household registration system not only created a high barrier for mobility from agricultural to non-agricultural occupations (or at least non-manual occupations; see below), but also weakened the intergenerational occupational status association observed in urban samples. The *de jure* urban population is comprised of two sectors: those born into families with urban registration, who are subject to mobility regimes typical of urban populations; and those who managed to convert their registration from rural to urban, based on their own educational or other achievements (Wu and Treiman 2004), and

thereby typically have experienced extreme upward mobility.² For this reason, research based on urban samples (or rural samples, although this is uncommon) is likely to be subject to severe selection bias (Winship and Mare 1992). To get the correct story with respect to social mobility patterns and processes, we need to analyze national data, which combine both rural and urban populations, and to take into account the role of the *hukou* system.

To our knowledge, Cheng and Dai (1995) is the only Chinese study that is sensitive to the problems for social mobility analysis created by rural-urban segmentation. Using pooled rural and urban data from six provinces, they found a high rate of inter-generational *immobility* in the Chinese working population, a finding that, as noted above, undercuts the claim that China became an unusually open society under the socialist regime. However, despite the inclusion of both rural and urban cases, their data are from selected regions and sampling points were not chosen via probability sampling procedures but rather picked impressionistically to represent particular types of places. Moreover, the *hukou* system, an institution that directly regulates rural-to-urban migration and attendant occupational mobility, was not considered in their analysis. They attribute the high rate of downward mobility into agricultural occupations observed in

² Although the urban population increasingly includes migrants from rural areas, living in cities while retaining their registration in their home villages, migrants are often entirely excluded from urban samples, which typically are based on registration (*hukou*) lists. For further discussion of this point as it pertains to the data analyzed here, see note 7.

their data,³ which increased across birth cohorts, to "the policy of rustication of urban youths and intellectuals, many of whom had come from service-class origins themselves" (Cheng and Dai 1995, p. 28).

We believe that this conclusion is not sound, since most youths and intellectuals "sent down" during the Maoist era had returned to the cities and resumed their urban status well before 1988, when their data were collected (Zhou and Hou 1999). We suspect, and will show below for our data, that the high rate of downward mobility into agricultural occupations is due to the household registration system, which blocks opportunities for the rural majority. The prospects of the children of peasants are tenuous even when the father leaves agriculture to work in rural industry or services.

The above discussion suggests the importance of the household registration system and *de jure* rural-urban segmentation in understanding intergenerational occupational mobility. In this paper, we analyze a national representative probability sample that includes both rural and urban components, and demonstrate how attending to the effect of the registration system helps make sense of the mobility patterns previously observed by other scholars but misinterpreted as consequences of socialist egalitarian ideology and radical policies to reduce inequalities. We start by estimating a status attainment model (Blau and Duncan 1967) and then move to the analysis of mobility tables. The central analysis of this paper employs a multinomial conditional logistic regression model, which combines the advantages of status-attainment models and log-

³ For instance, of respondents with fathers in professional occupations, 28 per cent of men and 23 per cent for women had agricultural occupations; and of respondents whose fathers had managerial positions, 38 per cent of men and 26 per cent of women had agricultural occupations (Cheng and Dai 1995, Tables 3 & 4).

linear mobility models, to investigate how different covariates affect intergenerational occupational mobility. We also specifically analyze downward mobility into agriculture as a way of understanding the process of blocked mobility imposed by the household registration system.

DATA AND VARIABLES

Data

The data used here are from the survey of *Life Histories and Social Change in* Contemporary China (Treiman and Walder 1996), a multi-stage stratified national probability sample of 6.090 adults aged 20-69 from all regions of China except Tibet (Treiman 1998; Treiman and Walder 1996). The sample was stratified by dividing each county into rural and urban portions, with the urban population sampled at three times the rate of the rural population. Within the rural sample, counties were divided into 25 strata on the basis of the proportion of the rural population with at least a middle school education. Two counties (xian) were chosen from each stratum with probability proportionate to the size of the rural adult population (PPS); within each county, one township (xiang) was chosen PPS; within townships, two villages (cun) were chosen PPS; within villages, 30 households were chosen from the permanent and temporary hukou lists; and within households, one adult (age 20-69) was chosen at random; this procedure yielded 3,003 cases. The urban sample was selected in the similar way, with the stages comprised of counties or county-level units (county-level cities and districts of larger cities), "street committees," and "neighborhood committees," vielding 3,087 cases (see Treiman [1998: Appendix D] for details). This is effectively a national probability

⁴ The data and documentation can be downloaded from [http://www.sscnet.ucla.edu/issr/da/].

sample of the Chinese population, since the population of Tibet is so small that it is extremely unlikely that any Tibetan counties would have been selected even if Tibet had been included in the population from which the sample was drawn.

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 apply case weight methods both for the descriptive statistics and for the model estimation.⁵

The questionnaire covered a broad range of topics and solicited information about both the respondents and their families. Information on respondents' household registration status (*hukou*), occupations, education, party membership, and similar

⁵ First, a weight (HHWT) equal to the ratio of the number of adults in the household to the mean number adults per household (estimated separately for the urban and rural samples) was computed. This is the appropriate weight to use when the urban and rural samples are analyzed separately. Second, since in 1995 29 per cent of the population of China lived in urban areas, a population weight (POPWT) was computed separately for the urban and rural samples, in each case = [1995 population/sample]*HHWT. For the urban population, POPWT=[3.52*10⁸/3087]*HHWT; for the rural population, POPWT=[8.59*10⁸/3003]*HHWT. Finally, weights were normalized to the original sample size: WEIGHT=POPWT/mean (POPWT). We use this variable as the appropriate weight when the rural and urban samples are analyzed together (Treiman 1998: Part III.1).

information about the respondent's father, is exploited in the analyses. We restrict our analysis to men aged between 20 and 69 years old.⁶

Variables

The most important variable in our analysis is occupation, for both the respondent and his father. Two different approaches can be employed to measure occupational status. We first use a continuous scale, the 1968-basis International Socioeconomic Index [ISEI] (Ganzeboom, De Graaf, and Treiman 1992), which had been added to the data set by the original investigators. However, to facilitate the analysis of sectoral barriers to mobility (Featherman and Hauser 1978; Goldthorpe 1987) and the more-or-less universal propensity for men disproportionately to work at jobs roughly similar to those of their fathers, we also code occupations into a 6-category version of the EGP scheme (Erikson, Goldthorpe, and Potocarero 1979; Ganzeboom et al. 1992; Ganzeboom and Treiman 1996). The relationship between the 10-category version proposed by Erikson et al. (1979) and the 6-category version used here is as follows:

⁶ Wu and Treiman (2004:376) found that, among those from rural origins, women actually are more likely than men to change *hukou* status when the effect of education is controlled. To avoid the confounding effect of gender in examining the role of the *hukou* system, and because intergenerational occupational mobility patterns are known to differ for men and women (Hauser, Featherman, and Hogan 1977; Hout 1988; Roos 1985), we analyze the sample of men only.

Original classification	New classification
I. Large proprietors, higher professionals and managers	6
II. Lower professionals and managers	6
III. Routine non-manual workers	5
IVa. Small proprietors with employees	4
IVb. Small proprietors without employees	4
V. Lower grade technicians and manual supervisors	3
VI. Skilled manual workers	3
VIIa. Unskilled and semiskilled manual workers	2
IVc: Self-employed farmers	1
VIIb. (Unskilled) agricultural workers	1

We code both the respondent's current occupation and his father's occupation when the respondent was age 14 with both measures and also code the respondent's first occupation with ISEI scores.

Among the covariates, *hukou* status is of our central interest. The survey collected information on *hukou* status at three time points: *hukou* at birth, *hukou* at age 14, and current *hukou* status. In addition, the place of residence in the Chinese urban hierarchy (ranging from "village" to "province-level city") was recorded for the same three time points. This information is nearly complete, with very few missing observations. We use *hukou* status at age 14, instead of *hukou* status at birth, as our measure of origin status, following the convention in status attainment and mobility analysis that measures of origin status when the respondent was an adolescent provide the best indicators of the effect of the family on the respondent's life chances. However, the choice is of little practical importance since only a small fraction of the population (less than 3 per cent) changed *hukou* status between birth and age 14.

The 19 percent of respondents born in or before 1941 had no *hukou* at age 14 since the system was introduced in 1955. For these respondents, an origin *hukou* was

imputed on the basis of residence at age 14: those living in villages were assumed to have rural *hukou* origins and those living in towns and cities were assumed to have urban *hukou* origins. *Hukou* status at age 14 is coded as a dummy variable (rural=1). Current residence, referring to the place where the respondent is interviewed, is coded as a dummy variable as well (rural=1).

It is well-known that education is both the primary determinant of occupational attainment and the main vehicle of intergenerational status transmission. Respondent's education is measured by years of schooling completed, and so is father's education when the respondent was age 14. The Communist Party is an important agency in socialist social stratification (Walder 1995; Walder et al. 2000). Both respondent's current party membership and father's party membership when the respondent was age 14 are coded as dummy variables (yes=1). We use the latter two covariates in investigating the determinants of downward mobility into agriculture.

Table 1 presents descriptive statistics for all continuous and dummy variables except for the EGP categories (which are shown in subsequent mobility tables). The first column describes the characteristics for the full national sample (of men) while the second and third columns contrast the characteristics of *de facto* rural and urban residents. In the entire population, 82 per cent of men were from rural origins, but only 71 per cent of them still lived in rural areas as of 1996. About 41 per cent of men currently residing in cities are from rural origins, including not only those who acquired urban status through their own efforts and hence achieved high-status urban occupations, but also rural migrants who, in the reform era, changed residence without changing *hukou* status. In the data analyzed here, 68 per cent of those moving from rural to urban places

(excluding the small number with urban registration whose parents worked in rural areas) also changed their registration from rural to urban, the remainder constituting the "floating population" of cities.

[TABLE 1 ABOUT HERE]

The descriptive statistics shown in Table 1 reveal dramatic differences between the rural and urban populations, with urban men (and their fathers) much better educated, holding substantially higher-status jobs on average, and being much more likely to be members of the Communist Party. These differences again underscore the distortion in our understanding of intergenerational mobility and status attainment in China that results from exclusive focus on either the urban or the rural sector.

⁷ These figures imply that 13 per cent (=.41*(1-.68)) of the urban population are informal migrants. Computations from the 2000 census yield a comparable estimate—12 per cent of the urban population lacks a local hukou. To be sure, the survey and census results are not entirely comparable, even apart from the four-year gap between them, because the census does not distinguish between rural-to-urban and urban-to-urban migrants, while the survey estimate refers to rural-to-urban migrants. However, a substantial majority of all migration is rural to urban (Liang and Ma 2004). Both the census and survey estimates are probably too low due to the undercount of migrants. Although the survey analyzed here took special pains to try to identify migrants by sampling from the register of temporary residents as well as the register of permanent residents, many migrants fail to register as temporary residents. Most Chinese surveys sample from the register of permanent residents and thus omit migrants altogether.

RURAL-URBAN SEGMENTATION, STATUS ATTAINMENT AND OCCUPATIONAL MOBILITY

We begin our analysis with a heuristic exercise to show the importance of the *hukou* system is as a key to understanding status attainment and occupational mobility in China. We first replicate Blau and Duncan's (1967, p. 170) classic model of status attainment with Chinese data, predicting current occupational status from the status of the respondent's first occupation, the respondent's years of schooling, and the father's occupational status and years of schooling. Table 2 shows the results.

[TABLE 2 ABOUT HERE]

First consider Model 1 for the urban portion of our sample (those with urban *hukou*), which replicates the modeling strategies used in the studies we cited at the outset (e.g., Blau and Ruan 1990; Lin and Bian 1991). The respondent' education and first occupation positively affect the attainment of his current occupational status, but father's occupational status has no significant effect. The contrast of standardized coefficients with the U.S. results is striking: the effects of both father's occupational status and respondent's education are far weaker in urban China than in the U.S., as is the explained variance, results that have been misinterpreted as evidence of socialist openness.

Moreover, father's years of schooling has a *negative* effect on son's occupational status attainment, a finding that makes no sense without appreciation of the high degree of selectivity of official rural-to-urban migrants. Among urban *hukou* holders at the time of the survey, about 28 per cent were from rural origins. Most of these successful *hukou* converters gained urban registration on the basis of their education. These men typically were highly upwardly mobile, ending up in positions of far higher status on average than

those of men who inherited an urban *hukou*. Since the fathers of rural-to-urban *hukou* changers generally were poorly educated, as was typical of peasants, the presence of such a large rural-origin fraction among those holding an urban *hukou* when surveyed explains the negative correlation between father's education and son's occupational status.

The rural sample also is strikingly different from what we are used to seeing in status attainment models, mainly with respect to very weak effect of education on occupational status (compared to urban China or the U.S.). This is largely because there is so little variance in occupational status—about three-quarters of the sample share a single ISEI score (16), for "field crop and vegetable farm workers"—but also because those doing non-agricultural work are concentrated in other manual occupations, for which formal education is not the main route to skill acquisition.

If we pool the urban and rural samples together and estimate the status attainment model for the total population of China, the (standardized) coefficients look much more like the corresponding coefficients for the U.S., although, for reasons we have just discussed, the effect of education is substantially weaker and of first job is stronger. Thus, from Model 1 we would conclude that China as a whole is no more open than is the U.S. Moreover, as we see in Model 2, *hukou* status at age 14 has a very strong effect on occupational attainment. Net of all other factors, men from urban origins have average occupational status scores 7.22 points higher than do men from rural origins.

The role of rural status in blocking occupational opportunities can be further verified by our second heuristic exercise, which tabulates sons' by fathers' occupations, using the 6-category EGP scheme described above. Table 3 present an out-flow mobility table for Chinese adult men aged between 20 and 69 years old in 1996.

[TABLE 3 ABOUT HERE]

The most anomalous feature of the Chinese mobility table is the high rate of mobility into agriculture (the row shown in bold): 17 per cent of Chinese men whose fathers were professionals and managers ended up in agricultural occupations, as did 26 per cent of small owners' sons and 24 per cent of foremen and skilled workers' sons. This pattern is seen neither in other state socialist countries nor in most developing nations.⁸

How can we account for the distinctive pattern of occupational mobility among Chinese men? Cheng and Dai (1995) found a similar pattern based on a different occupational classification scheme, but then offered what we regard as an unsound explanation, that the policy of sending urban young people "down to the countryside and up to the mountains," especially during the Cultural Revolution, resulted in substantial intergenerational mobility into agriculture. The difficulty with this explanation is that most of those who were sent down returned to the cities after just a few years (Zhou and Hou 1999). In the data used here, only 13 of the 170 urban-origin men (and only two of those with urban *hukou* at age 14) who had been sent down failed to resume an urban status. Since these men constitute less than 5 per thousand of those analyzed in Table 3, their inclusion has virtually no effect on our estimates.

We conjecture that the high rate of mobility *into* agriculture results from the *hukou* system that blocks occupational opportunities for the rural majority. Those from

four developing countries: Brazil (1973), India (1963), the Philippines (1973), and

Taiwan (1970). None of them shares this pattern. Tabular results are available upon

request.

 $^{^{8}}$ We have compared occupational outflow tables for six former state socialist nations in

¹⁹⁹³ or 1994 (Bulgaria, the Czech Republic, Hungary, Poland, Russia, and Slovakia) and

agricultural origins (that is, those who hold an agricultural *hukou* at age 14) have limited opportunities to convert to urban registration, mainly via specialized secondary or tertiary education and to a more limited extent through communist party membership or military service (Wu and Treiman 2004). Of course, some sons of peasant-workers will be able to exploit their fathers' connections to themselves secure non-agricultural jobs—something we will analyze later in the paper—but only a small fraction of the rural population is able to accomplish this. In short, the sons of peasant-workers remain peasants, even if their fathers have been able to escape from the fields, and, as such, their opportunities remain limited and substantial fractions end up in agriculture.

[TABLE 4 ABOUT HERE]

To confirm this conjecture, we show in Table 4 outflow mobility tables separated by *hukou* origin and destination. Panel A shows the mobility table for men of urban *hukou* origin, Panel B for men of rural origin, and Panel C for men of rural origin who did not acquire an urban *hukou* between age 14 and the survey year (1996). Additional evidence that the "send-down" policy did not increase mobility into agriculture is that virtually no one from urban origins held agricultural jobs, except for about a third of the sons of the small number of men who worked in agriculture even though they held an urban *hukou*. Instead, the pattern for those men mirrors that observed for the total male populations of most industrialized nations. In sharp contrast, however, there is a high rate of mobility into agriculture among those of rural origin (Panel B), which is even more pronounced when the small fraction of men who managed to change their registration status is excluded (Panel C). Among those who remained peasants (that is, retained their rural household registration), about three-quarters of the sons of small entrepreneurs and

agricultural workers and about half of the sons of fathers who did other non-agricultural work became agricultural workers themselves. Clearly, the dominant feature of the Chinese stratification system is the distinction between "peasants" (those with agricultural/rural *hukou*) on the one hand, and "workers" and "cadres" (those with non-agricultural/urban *hukou*) on the other. Even those who become "peasant-workers" (that is, are engaged in work outside agriculture) remain peasants and are subject to the restrictions on opportunities for the rural population imposed by state policy (Chan 1994; Wu and Treiman 2004), with attendant consequences for the mobility chances of their sons.

COMBINING STATUS ATTAINMENT AND SOCIAL MOBILITY ANALYSIS

The analyses above have demonstrated the importance of the household registration system in understanding the process of status attainment and the pattern of occupational mobility in China. But we need to go further, by exploring the pattern of mobility in a multivariate way. The advantage of linear models of status attainment, such as those we employed above, is the ease with which many explanatory variables can be analyzed together. However, this approach has its limitations, most importantly the inability of such models to capture the disproportionate propensity for men to follow in their fathers' footsteps, working at jobs in the same occupational class as their fathers, and the inability to model sectoral barriers to mobility. Both of these aspects of mobility are particularly important in China given the role of the *hukou* system in creating an institutionalized barrier to mobility for those of rural origins. A conventional alternative to linear models

⁹ The distinction between "workers" and "cadres" is important in urban China (Bian 2002; Wu 2001), but is beyond the scope of this paper.

is to utilize log-linear models of square mobility tables to decompose the pattern of association in the tables. But this approach makes it difficult to incorporate explanatory variables apart from the father's occupational category.

Our solution is to utilize multinomial conditional logistic regression models (Breen 1994; DiPrete 1990; Hendrickx 2000; Logan 1983) to carry out a multivariate analysis of the relative chances of moving between occupational categories. We believe that this type of model particularly suits our need for analyzing occupational mobility in China by permitting analysis of the 6x6 mobility tables shown above but with consideration of several covariates, both continuous and categorical (for other applications of this model see Dessens, Ganzeboom, and van der Heijden 2003; Hendrickx and Ganzeboom 1998). Specifically, we estimate Stereotype Ordered Regression (SOR) models (DiPrete 1990). The SOR model estimates a scaling metric for occupation categories that takes into account the effects of individual-level covariates. Unlike ordinal logistic regression, the SOR model assumes no specific order of occupational categories; but unlike standard multinomial logistic regression, it does assume that occupational categories can be rank-ordered; the scaling of categories is one of the outcomes of the analysis. The SOR model can be specified as:

$$\log\left(\frac{P(Y=q)}{P(Y=r)}\right) = \log \operatorname{it}\left(\frac{q}{r}\right) = \alpha_q - \alpha_r + (\phi_q - \phi_r) \sum_{k=1}^K \beta_k X_{k-(1)}$$

where Y is the son's occupation with categories j=1 to 6 and q and r refer to specific categories; α_j represents the constrained intercept parameters; the scaling metric for the dependent variable (occupation) is represented by the ϕ_j ; and the X_k are the covariates and the β_k are the effect parameters for the covariates. Hence, the effect of one unit

change in X_k on the log odds of being in one occupational destination rather than another is captured by $(\phi_q - \phi_r)\beta_k$, rather than by β_k as in a standard multinomial logit model. To identify the model, we need to impose some restrictions on ϕ_j :

$$\sum \phi_j = 0 \text{ and } \sum \phi_j^2 = 1.$$

In the framework of the SOR Model, Goodman's (1979a 1979b) Row and Column Model II can be written as

$$\log it \left(\frac{q}{r}\right) = \alpha_q - \alpha_r + (\phi_q - \phi_r)\mu\sigma_v \tag{2}$$

Father's occupation is treated as a covariate in the SOR model, except that it also needs to be rescaled by σ_v , and the effect of father's occupation on son's occupation is expressed by a single parameter μ , comparable to β_k in (1). Likewise, to identify the model, the same restrictions have to be imposed on σ_v :

$$\sum \phi_j = \sum \sigma_v = 0$$
, and $\sum \phi_j^2 = \sum \sigma_v^2 = 1$.

The Quasi-RC II Model, which uses the same metrics for both fathers' and sons' occupations, and saves (*J*-2) degrees of freedom, can be written as

$$\log it \left(\frac{q}{r}\right) = \alpha_q - \alpha_r + (\phi_q - \phi_r)\mu\phi_v$$
 (3)

We can also single out diagonal cells and model the immobility effects separately. Two parameters are of particular interest to us in a mobility table: (1) the inheritance parameter, measuring immobility (cases in which the father and son are in the same occupation category); and (2) the association parameter μ , measuring the extent of off-diagonal association. In general, we would expect positive parameters both for

inheritance and for off-diagonal association. A large μ indicates a high association between father's occupation and son's occupation for those who are occupationally mobile, given the scaling of categories that emerges from the estimation procedure.

Finally, we can estimate RC II models that incorporate covariates intervening between occupational origin and destination, and also can allow the association parameter μ to co-vary with one or more of them:

$$\log it \left(\frac{q}{r}\right) = \alpha_q - \alpha_r + (\phi_q - \phi_r)(\mu_0 + \mu_t X_t)\phi_v + (\phi_q - \phi_r)\sum_{k=1}^K \beta_k X_k$$
 (4)

where μ_0 is the basic association parameter and the μ_t are the effects of covariates X_t on the association (1<t<K). All the above models can be estimated iteratively by multinomial conditional logit models using Stata programs developed by Hendrickx (2000).¹⁰

Results and Interpretation

In the analysis reported here, we analyze all Chinese men (that is, the same men who are shown in Table 3). We include two covariates, education and whether one has changed *hukou* status since age 14, in addition to father's occupation. Education is a continuous variable measured by years of schooling; *hukou* change is coded as a dummy, created by comparing *hukou* status at age 14 and current *hukou* status, equal to 1 if *hukou* status changed and 0 otherwise.

In Table 5, we first fit a quasi RC II Model, which estimates the same metric for both fathers' and son's occupation for the national sample (Model 1). We then analyze mobility patterns separately for those with urban *hukou* at age 14 (Model 2) and those

^{10.} See the **mclgen** and **mclest** commands in STATA. The programs and detailed documentation can be downloaded from http://www.xs4all.nl/~jhckx/mcl/stata/

with rural *hukou* at age 14 (Models 3a, 3b, and 3c). Models 2 and 3a replicate Model 1 separately for those from urban and rural *hukou* origins. Model 3b explores whether the origin-destination association is affected by *hukou* mobility—that is, by a change from rural to urban *hukou* status. Finally, since education is both a means to social mobility and a pathway of social reproduction (Shavit and Blossfeld 1993; Treiman and Yip 1989), in Model 3c we include an interaction between education and *hukou* change as an additional covariate intervening in the process of intergenerational occupational mobility. (There is no point in studying change from urban to rural *hukou* status since this virtually never occurs in China.)

[TABLE 5 ABOUT HERE]

We report the estimated parameters for the models mention above: (1) the scaled scores for the six occupational categories; (2) the immobility rate; (3) the parameter indicating the association between origin and destination; and (4) the effects of covariates on occupational mobility. To conserve space, we omit the parameters for the intercepts.

It turns out the intergenerational occupational mobility in China is quite distinctive and does not conform well to the pattern we have come to expect from analyses of other nations—that mobility follows a socioeconomic gradient, with the odds of mobility diminishing the further apart in socioeconomic terms two categories are (Ganzeboom et al. 1989; Hout and Hauser 1992). We suspect that the distinctiveness of China reflects the operation of the *hukou* system that we have discussed at some length above. But we will have still more to say about this in the course of describing what Table 5 shows.

Model 1 in Table 5 is equivalent to the Quasi-RC II model in log-linear analysis

for square tables. Given the way the EGP classification is coded (Professionals/managers as 6 and Agricultural occupations as 1), the higher the score ϕ_i is, the "higher" the status of an occupation; and the larger the difference between the scaled scores for two occupational categories, the greater the effect of a covariate on the log odds of being in the "higher" of the two occupational categories. The model implies that agricultural occupations have the "lowest" status (-0.844), but professional/managerial occupations do not have the "highest" status—that is, they are not the most distant from agricultural workers in terms of the likelihood of mobility. Rather, routine non-manual workers are. We suspect that this result arises for two reasons. First, a substantial fraction of those in high-status positions are educationally successful sons of peasants. Those who are able to convert their hukou by obtaining tertiary education are also able to gain managerial and professional positions; 83 per cent of those with tertiary education were working in professional or managerial jobs at the time of the survey, and this holds true also for nearly the same fraction (82 per cent) of tertiary educated men from rural hukou origins whose fathers were employed in agriculture. Second, rural cadres, who are coded as managers, also are from peasant origins, which create an upward mobility stream even for those who retain rural registration status. The second anomaly in the table is the position of semi- and unskilled manual workers. In the U.S. and other developed nations, those who move off the farms tend to go into semi- and unskilled work (Blau and Duncan 1967:28-30; Featherman and Hauser 1978:89; Ganzeboom et al. 1989). But this does not appear to be the case in China.

The immobility parameter for Model 1 is .56 and the origin-destination association parameter is 1.51. To give a flavor of how mobility chances work in China,

consider what happens to the son of a professional or manager who himself does not become a manager or professional. For such a man, the odds of becoming a routine non-manual worker are 8.2 per cent (e^{0.127*(0.441-0.027))*1.506}-1) higher than the odds of becoming a small owner; 9.4 percent (e^{0.127*[0.441-(-0.027)]*1.506}-1) higher than the odds of becoming a foremen or skilled worker; 3.2 percent (e^{0.127*(0.441-0.276)*1.506}-1) higher than the odds of becoming a semiskilled or unskilled worker; and 27.9 percent (e^{0.127*[0.441-(-0.844)]*1.506}-1) higher than the odds of being a farmer. Thus, there is some tendency for the sons of highstatus men to acquire high-status occupations, net of immobility. However, compared to other countries, net of high immobility, China is relatively more open.¹¹

To properly understand this distinctive mobility pattern, however, it is helpful to estimate separate models for those from urban and rural origins. Note that this strategy is quite different from that employed by most analysts, who estimate separate models for those with urban and rural *destinations*. When we do this, the anomalous results observed for Model 1 are mitigated but do not entirely disappear.

First consider the results for the urban-origin sample. Since, as we have noted, there is virtually no mobility from urban to rural areas (or from urban to rural status), Model 2 pertains to a population that has enjoyed the benefits of the Chinese urban

¹¹ We replicated Model 1 with data collected in 1993 or 1994 from six former state socialist countries and the data collected in the 1960s and 1970s in four developing countries (see note 8). The immobility rates ranged from 0.29 (Slovakia) to 0.50 (Poland) among state socialist countries, and from 0.59 (Brazil) to 1.89 (India) among developing countries. The association parameters ranged from 1.66 (Slovakia) to 3.2 (Russia) among state socialist countries, and from 1.54 (Philippines) to 2.67 (Brazil) among developing countries.

welfare state, which, until very recently, has guaranteed every citizen a job upon school completion. For this subpopulation, there is much less immobility but a much higher association between origins and destinations than for the nation as a whole. This is so even though the scale scores are not very distinctive from one another, with the exception of agriculture. Oddly, the scale score for the professional/managerial category becomes negative, which means that it is "below" all categories except agriculture with respect to mobility chances. Again, as for the nation as a whole, the position of professional and agricultural positions probably reflects the meritocratic allocation process for these particular occupations, particularly the professional occupations among them, which tend to be filled by university graduates regardless of their origins. Notwithstanding the special character of professional and managerial occupations, what is striking about the urban- origin population is the very high off-diagonal association between origins and destinations, relative to what we observe in other nations (Ganzeboom et al. 1989; also see note 11). Had policies promoting social mobility worked well, we would expect a much lower association parameter for men from urban origins, since government interventions, through provisions of various socialist benefits to mitigate the effect of family background on socioeconomic achievements, have been much stronger in urban China than in rural China. Once again we have evidence contrary to the claims of those who have restricted their analysis to those with urban residence at the time of the survey.

For those from rural origins, the level of immobility is quite high but the degree of association in the table is weak (Model 3a). These results are just what we would expect. Immobility is high because most rural-origin people are from families in which the fathers did agricultural work and who themselves do agricultural work. The off-diagonal

association is weak for two reasons. First, a portion of the rural-origin population is successful in school and hence is able to escape to the cities by acquiring an urban *hukou* and, along with it, a high-status job. Second, apart from education, the ability to move out of agriculture may depend on a combination of chance factors (the presence of a town or village enterprise, the need for a rural cadre, or a driver for the commune, etc.) and personality traits. The result is that fathers who have escaped from agriculture but who remain peasants (that is, retain an agricultural *hukou*) find it difficult to pass their advantage on to their sons.

Despite the fact that the *hukou* system confines the majority of the Chinese population to rural status, some people from rural origins can convert to urban status through a highly selective process, as we have noted above. Those who are granted urban status tend to be assigned to administrative or professional jobs (Wu and Treiman 2004), further reducing the origin-destination association parameter. To show the critical importance of hukou mobility for occupational mobility, in Model 3b we allow the association parameter to vary depending on whether men have changed *hukou* status since age 14. In Panel C we see that for men from rural origins who currently hold rural registration status, the association parameter is 0.98, whereas for men who have converted their hukou status, the association parameter is actually negative (-2.23). That is, for rural-to-urban registration status converters there is an inverse association between origin and destination status. For such men, those from lower-status origins (that is, those whose fathers were in agriculture) are more likely to end up in higher-status occupations. For example, the odds of a peasant's son who has obtained an urban hukou becoming a professional or manager are 72 percent (e^{-0.875*(0.213+0.065)*(0.976-3.210)}-1) larger than the odds of becoming a small owner and 9.8 percent (e^{-0.875*(0.213-0.165)*(0.976-3.210)}-1) larger than the odds of becoming a foreman or skilled worker. The obvious reason for this is that education is the primary device by which one can successfully convert from a rural to an urban *hukou* (Wu and Treiman 2004).

We confirm this inference by estimating Model 3c, in which we let the association parameter vary with both *hukou* change and education (years of schooling). As in Model 3b, hukou change significantly reduces the association parameter between father's and son's occupations (p<.001): the association parameter is 0.296 for those retaining rural status and -1.05 for those who changed to urban status. However, education per se has no net effect on the *level* of off-diagonal association, although, as we see from the positive coefficients for both years of schooling and the interaction between years of schooling and *hukou* change, the effect of education on occupational attainment is significantly stronger for those who have successfully converted their *hukou* than for those who have not done so. Regardless of years of schooling, changing one's hukou status improves the odds of obtaining a high-status occupation by a factor of five, as we see by exponentiating the coefficient associated with hukou change: e^{1.609}=5.00. Second, the value of schooling is positive for both movers and stayers but is enhanced by hukou status change. Each additional year of schooling increases the net odds of gaining a highstatus occupation by a factor of 1.19 (e^{0.174}) for those remain rural *hukou* holders, but by a factor 1.33 (e^{0.174+0.110}) for those who converted to urban status. This difference is statistically significant (p<.05).

To summarize, *hukou* change plays an important role for men from rural origins in the process of intergenerational occupational mobility. The small fraction of rural-

origin men who have managed to achieve urban status have had a major impact on the mobility regimes of the urban population, in part because they constitute a much larger fraction of the urban than of the rural population and in part because they have experienced extreme upward mobility.

Even excluding those who have successfully converted their registration status, the origin-destination association parameter is still very weak. We already have discussed this when we dealt with Model 3a, but the association is much weaker in Model 3c than in Model 3a. In fact, it should be regarded as even weaker since the coefficient (.296) in Model 3c pertains to those who retained their rural *hukou* and totally lack education and the coefficient associated with the interaction between the association parameter and years of schooling is negative. As noted above, we believe that the high rate of downward mobility observed in Panel C of Table 4 can account for the high rate of relative mobility in rural China, and that this unusual pattern is associated with the household registration system.

Under state socialism, the Chinese government relied heavily on that system to allocate material rewards and life chances among its citizens. Those rural-origin people who were granted urban status were highly upwardly mobile, with advantages even greater than those of ordinary members of the urban-origin population. But the vast majority that was not successful in converting its *hukou* experienced a very different fate. As did their fathers before them, they toil in agriculture; and even when their fathers escaped from the fields, they became extremely vulnerable to downward mobility. Wu and Treiman (2004) have documented the former process (rural-to-urban *hukou* mobility) in great detail. Here, we complete our analysis by investigating the determinants of

downward mobility into agriculture among those of rural origins whose fathers had managed to gain non-agricultural positions. Put differently, we investigate the conditions under which rural men who have managed to escape from agriculture are able to pass their advantage on to their sons.

EXPLAINING DOWNWARD MOBILITY INTO AGRICULTURE

In this final analytic section, we examine downward mobility into agriculture by estimating discrete-time hazard models. We restrict the analysis to the sample of men from rural origins whose fathers held non-agricultural occupations when they were age 14 and set the clock as the year of entering the labor force. A discrete-time hazard model involves a shift in the unit of analysis from respondents to person-years at risk of an event (i.e., mobility into agriculture). In our analysis all men from rural origins whose fathers were not farmers are considered "at risk" of mobility into agriculture in each year, starting from their entry into the labor force. We only model the first occurrence of the event, even though "repeated failures" (shifts back and forth between agricultural and nonagricultural occupations) are possible and even probable. Those who had not yet entered agriculture by 1996 or the year when they left the labor force are right-censored. Re-structuring the data yields 3392 person-year records, which we analyze by employing conventional procedures for estimating binary logit models (Allison 1982).

[TABLE 6 ABOUT HERE]

Table 6 presents the estimated parameters. We consider father's occupation, education, and party membership; respondent's education, party membership, and labor market experience prior to the year at risk; and *hukou* status change as independent

variables. Father's occupation is measured with the six EGP categories used previously, father's education is a continuous measure of years of schooling, and father's party membership is coded as a dummy variable (yes=1). Since the effect of education on the odds of *hukou* mobility is known to be nonlinear, with thresholds at vocational education and college education (Wu and Treiman 2004), we treat the respondent's education, a time-varying covariate, as a set of categorical variable measuring educational levels (1=primary school 2= junior high school; 3= senior high school; 4=vocational school; and 5=college or above). Respondent's party membership refers to political status prior to the move into agricultural occupation, and *hukou* change refers to whether one has changed *hukou* status since age 14, i.e., whether the respondent now holds an urban *hukou*. These two variables are both coded 1 if yes and 0 otherwise. Labor market experience is a continuous variable measuring the difference between the year at risk and the year of entering the labor force.

In Model 1 of Table 6, we include as covariates only variables pertaining to family background, namely, father's occupation, education and party membership.

Surprisingly, none of these factors has a significant effect on mobility into agriculture. In other words, among those from rural origins, a father's advantage with respect to education, political status, and occupational achievement cannot protect his sons from downward mobility into agriculture.

What the coefficients in Table 6 make clear is that if a man is able to avoid downward mobility, it is through his own achievements. In Model 2 we add respondent's education (expressed as a set of categories), party membership, and labor market experience. Unlike the family background characteristics, the respondent's own

education and party membership are strong predictors of the odds of downward mobility into agriculture. The odds of moving into agriculture are only 31.4 per cent (e^{-1.158}) as large for men with junior high school education as for men with primary education, 15.7 percent as large for men with academic senior high school education, 7.2 per cent as large for men with vocational school education, and 0.8 per cent as large for men with tertiary education. In addition, political status continues to be important in China. The Membership in the Chinese Communist Party not only facilitates upward mobility, as shown by other analysts (e.g., Walder 1995; Walder et al. 2000), but also protects against downward mobility. A party member's net odds of moving into agriculture are only 14.1 percent (e^{-1.962}) those of a non-party member's odds. Finally, the likelihood of entering agriculture diminishes as labor market experience increases. Each extra year of experience in a non-agricultural job decreases the net odds of downward mobility into agriculture by 2.6 percent (e^{-0.026}-1).

Since, as we know, both education (especially tertiary education) and party membership help promote upward *hukou* mobility from rural to urban status (Wu and Treiman 2004), the advantages enjoyed by vocational and college graduates over those with primary or junior high school education might simply be due to the *hukou* mobility of a subset of the sample. To check this possibility, we introduce an additional variable—*hukou* change—in Model 3. Consistent with our previous findings, *hukou* change for men from rural origins not only facilitates upward mobility, but also deters downward mobility into agriculture. For men who have experienced mobility from a rural to an urban *hukou*, the odds of mobility into agriculture are only 44 per cent (e^{-0.811}) of the corresponding odds for those who retained their rural *hukou* status. However, net of the

effect of *hukou* change, education and party membership continue to help protect against downward mobility into agriculture.

In Model 4, we add interactions between levels of education and *hukou* change. This model reveals that vocational school education and tertiary education are protective against downward mobility into agriculture, regardless of *hukou* change, probably because of the specific skills acquired through these two types of education (everyone analyzed in Table 6 who attained tertiary education also successfully converted his *hukou*). Junior high school education and academic senior high school education are protective only for those who somehow managed to convert their *hukou* (which is not at all automatic for those with these levels of schooling), but not for those who retained their rural *hukou* status.

In sum, Chinese men from rural non-agricultural origins gain little from their father's educational achievement and party membership with respect to their own occupational attainment. Nor can they exploit their fathers' occupational advantages within the non-agricultural sector to prevent downward mobility into agriculture. Instead, their own political accomplishments and education, with the latter enhanced by the successful conversion from rural to urban *hukou* status, are what provide them a measure of protection from downward mobility.

SUMMARY AND CONCLUSIONS

In this paper we have analyzed the effect of family background on occupational status attainment and mobility in contemporary China, with particular attention to the rural-urban institutional divide. We first showed that men's status attainment is more

dependent on their father's occupational status in rural China than in urban China. In the latter, family background has a weak and insignificant effect on respondents' occupational status. However, the inference of some observers that a socialist egalitarian program has been successfully implemented in urban China is incorrect, because it fails to take account of the positive selection of the best and brightest of the sons of peasants, who go far in school (attaining vocational or tertiary education), move into cities, and achieve very high status jobs. The extreme selectivity of rural to urban mobility is the result of the household registration (*hukou*) system, which divides the rural and urban populations and strictly regulates the conversion from rural to urban status. It is the fraction of extremely upwardly mobile men from rural origins in urban samples that accounts for the weak or insignificant association between father and son's occupational status in urban China.

To get an accurate picture of status attainment and social mobility in China, we then analyzed a national probability sample of the male population aged from 20 to 69, with both rural and urban components. By doing so we found the degree of intergenerational transmission of occupational status in China is about as strong as that in the U.S.. Analysis of intergenerational mobility tables revealed that Chinese men experience unusually high rates of downward mobility into agriculture compared to other nations, capitalist and socialist alike. We further demonstrated that this is true only for the sub-sample of men from rural origins; men from urban origins have experienced essentially no downward mobility into agricultural occupations.

To investigate how the Chinese household registration system intervenes in the process of occupational mobility, we estimated multinomial conditional logit models,

which combine the advantages of status attainment and mobility models. These models allowed us not only to calculate the extent of occupational "inheritance" or immobility and the association between father's and son's occupation for those who were mobile, but also permitted us to estimate the effects of other covariates (*hukou* change, education) on mobility rates. With respect to the overall level of mobility, Chinese men do not differ much from men in other former state socialist societies: unsurprisingly, in China, as elsewhere, there is a significant and positive association between father's occupation and son's occupation. Net of its higher occupational immobility, China is slightly more open than any of the six former state socialist societies that we analyzed for comparative purposes. However, the association is far stronger among men from urban *hukou* origins than men from rural *hukou* origins in China, and also far stronger in urban China than for men in any other former state socialist nation. It is the weak association between father's and son's occupations among men from rural origins that causes the "openness" of social mobility in China.

We dismiss the attribution of social fluidity observed in (rural) China to the socialist egalitarian policies implemented by the government. Had those polices worked in the way they were ostensibly intended, we would have expected higher social fluidity among men from urban origins than among men from rural origins, since state intervention has been far more penetrating in urban than in rural China. Nevertheless, we observe a quite opposite picture. We look to China's unique household registration system to account for the distinctive Chinese mobility pattern.

Since its implementation in 1955, the *hukou* system has been employed by the Chinese government as the main tool to restrict rural-to-urban migration and to distribute

resources and life chances, with many important implications for social mobility. Under this system, the children of women with urban registration status are automatically granted urban status at birth and are entitled to privileged benefits conferred by the socialist state—access to quality education, medical care, and decent jobs. The *hukou* registration system protects those born into urban families from downward mobility, resulting in a high association between father's and son's occupational status among men from urban *hukou* origins.

Men from rural families have to compete for urban status, and only a small portion can be successful in the highly selective process. Because of their high level of education, they typically end up in high-status jobs. The inclusion of this highly mobile group in urban samples reduces the association between father's and son's occupation; when calculations are based on those from urban *origins* rather than on those with urban *destinations*, the association parameter becomes much stronger. But association parameters calculated for those from rural origins are also weak, reflecting both the upward mobility of the educationally successful and the relatively downward mobility of those whose fathers have managed to escape from agriculture.

To further explore the distinctive pattern of downward mobility into agriculture, we conducted a discrete-time hazard analysis of the determinants of downward mobility into agriculture for men of rural origins whose father worked outside of agriculture. The results showed that the specific kind of non-agricultural occupation had no impact, and neither did father's education or communist party membership. By contrast, a man's own educational and political achievements are helpful in protecting against mobility into agriculture. Furthermore, *hukou* mobility after age 14 is a critical factor in preventing

downward mobility. Hence, rural *hukou* status not only blocks upward mobility but also makes the sons of rural men who work outside agriculture vulnerable to downward mobility.

Our findings pose a great challenge regarding the role of the socialist state in generating social equality and inequality. Because of the household registration (*hukou*) system and its selective process, although a small fraction of rural men was able to achieve high-status occupations, many were unable to take advantage of their father's achievements. The ironic "openness" of Chinese society is thus, in fact, due to state intervention, through the installation of a system that creates two unequal classes of socialist citizens. It is the institution that implements discriminatory treatment against the majority of the rural population, rather than state egalitarian policies, that lead to a socialled "open" society. Our analyses thus call for a deeper understanding of the role of the socialist state in creating social inequality and equality.

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TABLE 1
Descriptive Statistics for Variables in Status Attainment and Social Mobility Models:
Chinese Men Age 20-69 in 1996, by Place of Residence in 1996

	National	Rural	Urban			
Continuous variables: means and, in parentheses, standard deviations						
Respondent's current occupation ISEI	29.4	23.3	45.5			
	(17.4)	(13.9)	(15.4)			
Respondent's first occupation ISEI	24.6	20.5	35.5			
	(15.2)	(11.4)	(18.1)			
Respondent's years of schooling	7.4	6.5	9.5			
	(3.7)	(3.5)	(3.5)			
Father's occupation ISEI	24.0	20.0	34.7			
	(15.6)	(11.6)	(19.2)			
Father's years of schooling	3.1	2.5	4.8			
	(3.7)	(3.1)	(4.6)			
Birth year (two digits)	55.2	55.3	54.9			
	(13.0)	(12.9)	(13.1)			
Dichotomous variables: proportions						
Hukou status at age 14: rural	.82	.98	.41			
Current residence: rural	.71	-	-			
Member of the Communist Party	.14	.10	.25			
Father Party member when R age 14	.11	.08	.20			
Weighted N	2,844	2,057	787			
Unweighted N	2,844	1,449	1,395			

TABLE 2
Coefficients of a Model of Status Attainment (following Blau and Duncan), Chinese Men
Age 20-69 in 1996 (standard errors in parentheses)^a

	Model 1				
	U.S. 1962 ^b	Urban	Rural	Total	Total
Metric coefficients					
Father's years of		376	188	254	269
schooling		(.114)	$(.134)^{c}$	$(.101)^{d}$	(.099)
Father's ISEI		.026	.113	.179	.111
		$(.027)^{e}$	(.039)	(.027)	(.029)
Years of schooling		1.290	.760	1.104	1.055
		(.142)	(.138)	(.112)	(.108)
ISEI of first job		.333	.419	.502	.468
		(.034)	(.060)	(.034)	(.035)
Urban hukou age 14		-	-	-	7.22
					(1.03)
Constant		22.3	7.95	5.44	17
		(.86)	(1.19)	(.88)	$(1.09)^{\rm f}$
R^2	.43	.320	.206	.403	.421
Standardized east					
Standardized coeff.	014	111	042	054	057
Father's yrs of schooling Father's ISEI					057
	.120	.033	.094	.160	.099
Years of schooling	.397	.291	.189	.235	.224
ISEI of first job	.282	.390	.345	.437	.407
Urban hukou age 14	-	-	-	_	.158

Notes —

^a The standard errors shown here are derived by using Stata's survey estimation procedures, which correct for clustering and stratification of the sample (Stata Corp 2003). See the text for details on the sample design. However, villages and neighborhoods are treated as PSU's rather than counties, on the ground that homogeneity is much greater within villages and neighborhoods than within counties.

^b From Blau and Duncan 1967:174.

^c P-values are less than .01 except where explicitly indicated. The p-value here is .174.

^d The p-value is .015.

e The p-value is .873.

f The p-value is .819.

TABLE 3
Outflow Table for Chinese Men Age 20-69 in 1996 (6-Category EGP Classification)

	Father's Occupation						
Respondent's Occupation.	I, II	III	IVa/IVb	V, VI	VIIa	IVc/VII	Total
						b	
Profs., managers(I,II)	40.3	32.5	33.8	13.7	18.7	11.0	15.5
Routine non-manual (III)	7.5	18.3	6.3	6.3	13.6	3.0	4.8
Small owner (Iva, Ivb)	4.4	3.2	12.9	6.1	4.9	2.7	3.4
Foremen, skilled (V, VI)	19.9	20.8	10.0	34.9	29.7	13.0	16.6
Semi- & unskilled (VIIa)	11.0	16.6	11.5	14.8	18.7	4.7	7.4
Agricultural (IVc, VIIb)	16.9	8.6	25.5	24.3	14.5	65.6	52.3
Total [–]	100.0	100.0	100.0	100.1	100.0	100.0	100.0
Weighted N	(289)	(74)	(31)	(234)	(172)	(2,044)	(2,844)
Unweighted N	(404)	(707)	(44)	(295)	(222)	(1,772)	(2,844)

TABLE 4
Outflow Tables for Chinese Men Age 20-69 in 1996 (6-Category EGP Classification), by *Hukou* Origin

	Father's Occupation						
Respondent's occupation	I, II	III	IVa, IVb	V, VI	VIIa	IVc, VIIb	Total
Panel A: urban origin							
Profs., Managers(I,II)	49.0	35.8	50.7	18.1	26.7	36.5	35.0
Routine non-manual (III)	10.3	17.7	5.3	10.8	12.0	4.5	10.3
Small owner (Iva, Ivb)	3.3	4.5	16.0	4.5	4.8	2.6	4.3
Foremen, skilled (V, VI)	22.2	21.3	12.0	41.0	32.9	12.2	26.2
Semi- & unskilled (VIIa)	12.4	20.7	16.0	24.1	23.6	10.0	17.5
Agricultural (IVa, VIIb)	2.8	0.0	0.0	1.5	0.0	34.3	6.8
Total	100.0	100.0	100.0	100.0	100.0	100.1	100.1
Weighted N	(155)	(46)	(18)	(109)	(94)	(83)	(505)
Unweighted N	(244)	(73)	(28)	(172)	(147)	(131)	(795)
Panel B: rural origin							
Profs., managers(I,II)	30.3	26.7	10.9	9.8	9.1	9.9	11.2
Routine non-manual (III)	4.2	19.5	7.6	2.4	15.5	3.0	3.7
Small owner (Iva, Ivb)	5.6	0.9	8.6	7.5	5.0	2.7	3.2
Foremen, skilled (V, VI)	17.2	19.9	7.3	29.5	25.8	13.0	14.6
Semi- & unskilled (VIIa)	9.5	9.6	5.4	6.6	12.9	4.5	5.2
Agricultural (IVa, VIIb)	33.3	23.4	60.1	44.3	31.7	66.9	62.1
Total	100.1	100.0	99.9	100.1	100.0	100.0	100.0
Weighted N	(134)	(27)	(13)	(125)	(79)	(1,961)	(2,339)
Un-weighted N	(118)	(24)	(11)	(109)	(69)	(1,718)	(2,049)
Panel C: rural origin and cu	rrent rural re	gistratio	<u>n</u>				
Profs., managers(I,II)	17.0	12.1	0	7.1	10.6	5.3	5.5
Routine non-manual (III)	3.2	19.5	9.7	2.0	14.2	2.5	3.0
Small owner (Iva, Ivb)	6.6	1.7	11.0	7.4	6.7	2.7	3.7
Foremen, skilled (V, VI)	13.6	16.6	2.3	25.5	20.9	11.6	9.0
Semi- & unskilled (VIIa)	10.2	4.0	00	5.5	5.2	3.3	7.5
Agricultural (IVa, VIIb)	49.5	46.1	77.0	52.6	42.5	74.5	71.3
Total	100.1	100.0	100.0	100.1	100.1	99.9	100.0
Weighted N	(79)	(14)	(10)	(105)	(58)	(1,743)	(2,009)
Un-weighted N	(61)	(11)	(8)	(81)	(46)	(1,350)	(1,557)

TABLE 5
Parameters for Multinomial Conditional Logistic Regression Models of Occupational Mobility, Chinese Men Age 20-69 in 1996, by *Hukou* Origin

	Total	Urban		Rural			
	Model 1	Model 2	Model3a	Model 3b	Model3c		
	Panel A: Equal origin-destination Scaling Metric ^a						
Profs., managers(I,II)	0.127	-0.080	0.006	0.213	0.514		
Routine non-manual (III)	0.441	0.228	0.671	0.263	0.141		
Small owner (Iva, Ivb)	0.027	0.100	-0.033	-0.065	-0.057		
Foremen, skilled (V, VI)	-0.027	0.321	-0.257	0.165	0.024		
Semi- & unskilled (VIIa)	0.276	0.293	0.259	0.298	0.198		
Agricultural (IVa, VIIb)	-0.844	-0.862	-0.645	-0.875	-0.820		
		Pa	nel B: Immo	bility			
Father-son in the same	0.558	0.401	0.595	0.542	0.583		
occupation	(0.078)	(0.111)	(0.092)	(0.134)	(0.131)		
		Panel C: Or	igin-destinati	on Association	on		
Overall association	1.506	3.161	1.013	0.976	$0.296^{\rm b}$		
	(0.147)	(0.464)	(0.248)	(0.191)	(0.388)		
Association* hukou	_	_	_	-3.21	-1.346		
change				(0.220)	(0.324)		
Association* year of	-	-	-	-	-0.021^{c}		
schooling					(0.040)		
	Panel D: The Stereotype Ordered Effects of Covariates						
Years of schooling	-	_	-	-	0.174		
C					(0.032)		
Hukou change	-	-	-	-	1.609		
C					(0.427)		
Year of schooling*hukou	-	-	-	-	0.110^{d}		
change					(0.046)		
	Panel E: Model Fit Statistics						
N	17064	4770	12294	12294	12294		
Log Likelihood	-3678.25	-746.30	-2798.15	-2627.49	-2430.89		
LR χ^2	3006.62	347.53	2927.71	3268.01	3661.22		
Degree of Freedom	7	7	7	8	12		
Notes —	,	,	,	<u> </u>	12		

Notes —

^a Parameters for the intercepts are omitted to conserve space. No standard errors for scaling parameters.

^bP-values are less than .01 except where explicitly indicated. The p-value here is .446;

^c The p-value is .596;

d The p-value is .018.

TABLE 6
Discrete-time Hazard Model of Downward Mobility into Agriculture: Chinese Men from Rural Origins Whose Father Worked Outside of Agriculture (N=3,392)^a

Rurai Origins whose rame	Model 1	Model 2	Model 3	Model 4			
Father's occup: (Profs., managers [I,II] omitted)							
Routine non-manual (III)	-0.368	-0.566	-0.456	-0.504			
Housing non manaar (111)	(0.415)	(0.456)	(0.485)	(0.540)			
Small owner (Iva, Ivb)	0.821	0.840	0.883	1.066			
211wii 2 (11w, 110)	(0.691)	(0.789)	(0.737)	(0.714)			
Foremen, skilled (V, VI)	0.509	0.077	-0.077	-0.006			
	(0.306)	(0.352)	(0.349)	(0.343)			
Semi- & unskilled (VIIa)	0.529	-0.014	-0.130	-0.013			
,	(0.406)	(0.432)	(0.450)	(0.427)			
Father's education	-0.000	0.008	0.007	-0.003			
	(0.039)	(0.040)	(0.042)	(0.045)			
Father party membership	0.175	-0.008	-0.022	-0.078			
	(0.331)	(0.402)	(0.404)	(0.407)			
Respondent's education (Primary s	chool omitted)	. ,	, ,	,			
Junior H. S.	-	-1.158 ^c	-1.036 ^d	-0.708			
		(0.404)	(0.444)	(0.481)			
Senior H. S.	-	-1.854 ^b	-1.537 ^b	-0.856			
		(0.523)	(0.559)	(0.578)			
Vocational S.	-	-2.638 ^b	-2.284 ^c	-1.969 ^d			
		(0.609)	(0.634)	(0.770)			
College or above	-	-4.881 ^b	-4.234 ^b	-5.312 b			
		(1.168)	(1.242)	(1.295)			
Respondent's party membership	-	-1.962 ^b	-1.782 ^c	-1.947			
		(0.512)	(0.586)	(0.440)			
Hukou change since age 14	-	-	-0.811 ^d	0.506			
			(0.340)	(0.654)			
<u>Interactions</u>							
Junior H. S. * hukou change	-	-	-	-1.811 ^d			
				(0.813)			
Senior H. S. *hukou change	-	-	-	-3.033 ^b			
				(0.884)			
Vocational S. *hukou change	-	-	-	-1.491			
				(1.141)			
College or above*hukou change	-	-	-	-			
Labor market experience		-0.026 ^c	-0.025 ^c	-0.026 ^c			
	•	(0.008)	(0.009)	(0.008)			
Constant	-2.958 ^b	-0.735	-0.612	-0.647			
	(0.595)	(0.870)	(0.881)	(0.868)			

Notes —

^a The standard errors shown here in parentheses are derived by using Stata's survey estimation procedures, which correct for clustering of the sample. Data are weighted. ^b All p values are greater than .05 except where explicitly indicated. The p value here is less than .001. ^c The p value is less than .05.