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Getting Ahead in Rural China:
Elite Mobility and Earnings Inequality in Chinese
Villages

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Getting Ahead in Rural China:
Elite Mobility and Earnings Inequality in Chinese Villages*

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The Questions

This study examines the mechanisms and factors that affect the stratification order in contemporary rural China. It investigates whether elite mobility and earnings inequality vary over time due to fast-growing economic development and substantial structural change. It also aims to explore whether elite mobility and income equality vary across regions due to their diversifying socio-economic conditions and institutional environment. Empirically, this study investigates the relationship between individual characteristics and career opportunities by comparing the varied strength of the relationship across villages. Thus it identifies the contextual sources of the variation and examines the effect of institutional changes (i.e. privatization and democratization) in altering the mechanisms of stratification in Chinese villages. Specifically, it explores two processes: firstly, to what extent individual and village-level factors affect one's career opportunities (i.e. to be a village cadre, businesspeople, or a farmer or peasant worker). Secondly, it investigates to what extent career mobility, together with other individual and contextual factors, affects earnings inequality.

For the past decade rigorous empirical research has been conducted on socio-economic inequalities and social mobility in China. They both show continuity and change in the once politicized social mobility regime. However, we lack convincing answers to long posed questions, and wish for preliminary answers to some recent questions. First, despite the greater and more profound transformations occurring in the countryside, there is relatively much less research output on rural China than on urban China (Bian 2002). Over the past two decades, the once homogeneous "peasant class" (Parish 1975) has been socially differentiating itself. Market expansion, property rights transformation, and recently promoted grassroots democracy have called for a closer examination on the stratification order of Chinese villages.

Second, there is relatively much less attention paid to elite stratification in contemporary China studies than to income distribution. Income is but one indirect indicator, instead of the proxy of power and political positions. In the transformation of post-communist countries, the liberalization of political markets is no less

important than the liberation of economic markets. Studies indeed examine economic returns to political power (e.g., Cao and Nee 2000, Walder 2002), but, except recent works by Walder and his colleagues (Walder 1995; Walder, Li, and Treiman 2000), little has been done about the determination of achieving political positions, particularly in grassroots politics in Chinese countryside. Some scholars look forward to seeing market reforms changing the political mechanisms of the Chinese Communist regime from virtuocracy to meritocracy (Shirk 1984, Lee 1991), but empirical findings to test such a thesis are insufficient. .

Finally, the effect of contextual factors and effect of regional variation in the extent of institutional change on stratification mechanisms need to be carefully designed and further clarified. A great deal of existing research on income stratification in China centers on the types of individual characteristics that have gained more rewards during the reform era (Nee 1989, 1991; Peng 1992; Bian and Logan 1996; Lin and Bian 1991). The effects of institutional arrangements on the relationship of individual factors and the stratification order are not well addressed. Works by Xie, Nee, and Walder (Xie and Hannum 1996; Nee 1996; Walder 2002) employ multilevel analysis to examine regional variations in income distribution through economic growth and industrialization. This study intends to address their studies by examining elite stratification and emphasizing the contextual effects of key institutional arrangements.

Institutional analysis is crucial for a better understanding of the dynamics and mechanisms of elite mobility and earnings inequality in Chinese villages. In addition to addressing how individuals are rewarded according to their individual characteristics, institutional sources of inequality would further explain inequality structures. The same situation prevails if one considers regional heterogeneity in rural China, and recently promoted electoral institutions across the countryside. Treating rural China as a homogeneous entity is both methodologically unsound and theoretically wasteful. It is methodological fragile because regional variation in career and earnings determinations is substantial. And, it is theoretically wasteful because we can take advantage of the regional variation in career and earnings determination to test theories that relate stratification order and inequality to the progress of institutional changes. Regional heterogeneity in rural China is significant and

considerable, not only because the pace and degree of economic growth in different parts of Chinese countryside are different, but also, and more importantly, because Chinese rural reform has shown different developing models, all leading to industrialization and development (Byrd and Lin 1990; Chen 2004). Besides economic institutional variations, regional disparities in degree and kind of grassroots democratization are due partly to economic development, and to a deliberate trial scheme imposed at the outset by the central state. (O'Brien 2001; Shi 1999). The key question that this study addresses is the extent to which village electoral institutions in rural China change their power base and their income distribution.

Results of a 2002 National Survey

The data for this study comes from a 2002 China Survey, conducted under the auspices of the Comparative Study of Democratization and Value Changes in East Asia Project (also known as East Asia Barometer Survey). The Project was launched in summer 2000 and was funded by the Ministry of Education in Taiwan under the MOE-NSC Program for Promoting Academic Excellence of University. The Project is under the co-directorship of Profs. Fu Hu and Yun-han Chu at National Taiwan University (see Appendix for complete descriptions of the sample design and fieldwork procedures).

The data of the 2002 China Survey come from a nationally representative multistage stratified random sample of individuals. The survey yielded 3,183 valid cases in total (drawing from 67 cities or districts and 62 counties), representing China's adult population over 18 years old residing in family households at the time of the survey. In addition, a village survey was conducted in conjunction with the larger country-wide survey, in which five to eight villagers were selected and interviewed in each randomly selected village. While the interviews for villagers were conducted, the village government was also approached for its assistance in filling out a village survey questionnaire. Among the national 3,183 cases, village-level data are available for 1,202 cases from 214 villages, accounting for 83% of the sampled villages across the country. This sub-sample fairly represents the rural population in China. The present analysis employs the individual-level data of this sub-sample and

their village-level data.

This study implies multilevel relationships between village context and individual determinants of career opportunities or income determination, and the data includes measures at both the individual and contextual level. That is, it implies relationships not only between individual characteristics and the respondent's career opportunity (or income), but also relationships between the village's socio-political characteristics and the effects of individual characteristics on one's career opportunity (or income). The estimation methods must therefore take account of the multilevel hypotheses and data. Multilevel or hierarchical models, which nest one level of data (in this case, individuals) within another level of data (in this case, village), are appropriate for testing such hypotheses. Dealing with multilevel data by simply assigning macro-level values to each individual in a village creates statistical problems: it ignores non-independent errors for individuals within the same village and heteroscedasticity across villages, and exaggerates the degrees of freedom for village-level variables (Gua and Zhao 2000). These problems bias downward the estimates of standard errors. Multilevel or hierarchical models correct these problems by including a separate error term for the macro-level units, and allow for appropriate tests of significance for macro-level variables (Kreft and de Leeuw 1998; Raudenbush and Bryk 2002).

There are three parts to this analysis. Firstly, it examines to what extent one's career opportunity as a village cadre, businesspeople, or a farmer is affected by his/her human capital, political capital, and kinship capital, as well as village-level economic and institutional characteristics. Secondly, this study compares the elite and ordinary villagers (i.e. the elected director of villagers' committee and farmers or peasant workers) to see what factors lead to divergent career paths. Then, the focus turns to earnings inequality, investigating how individual and village-level factors affect one's household income. The effects of social capital are included in the analysis.

Individual level measures

Measures of human capital are intended to capture changes introduced by markets (Nee 1989, 1996; Xie and Hannum 1996). For this purpose the conventional measures of human capital used are education and experience. (Liu 1998; Peng 1992;

Xie and Hannum 1996). Here human capital is measured by the levels of formal schooling and experience. *Primary*, *Junior*, and *advanced* are dummy variables for individuals who graduated from primary school, junior middle school, or senior middle school, technical school, college, or university. Because there were so few cases with education above the senior middle school level, those attending technical school, college, or university were pooled together with those who received senior middle school education. The omitted reference category is the individual who never attended school or failed to graduate from primary school. The *age* of the individual is employed to approximate work experience. Gender (1 if male, 0 if female) serves as a control in the analysis.

Kinship capital is a dummy variable measured by whether an individual belongs to the largest lineage branch (*fang*) in the whole village (1 if yes, 0 if no). Literature in rural China documents that it primarily is the lineage branch in a village, not the surname group or grand lineage, which serves to provide their members with common vested interest, network capital, and help. Members of the same lineage branch often establish loyalty networks and, through branch rites and activities, consolidate their identity and have assistance-networks. (Chan et al. 1992: 323; Chen 2004: 142).

Party member is a dummy variable indicating whether an individual is a party member (1 if yes, 0 if no).

Social capital is conceptualized as “resources embedded in a social structure that are accessed and/or mobilized in purposive actions” (Lin 2001: 29). These resources are not possessed by individuals but tied to social relations. Social capital theory predicts that having greater access to social capital may enable one to realize status attainment (Lin 2001). More specifically, the quantity and quality of social capital are expected to contribute to its value as a means of social mobility. Lin pioneered the usage of the position generator approach to measure social capital (Lin and Dumin 1986). The position generator approach samples a number of hierarchically ranked positions and asks respondents to indicate whether they have contacts in each of the positions. In this study the respondent is asked about eight occupations: primary school teacher, deputy of people’s congress, section chief (科長) or township mayor (鄉鎮長), division chief (處長) or county magistrate (縣長), bureau chief (廳局

長), entrepreneur (企業家), lawyer, and bank official. The occupations in this study swing to higher prestigious occupations in government and highlight the upper reachability in the position generator approach. Excluding the primary school teacher which is more commonly reachable, I use the sum of the number of positions respondents have contacts with (for each position, 1 if yes and 0 if no) as indicators of *social capital*. Since the analysis aims to test the influence of social capital on income inequality, it is important to rule out the possibility of reverse causal link in which social capital is brought by earnings. Considering this issue, to certify that the respondents' access to social capital was available before they launched or acquired any resources, in this study only the ties that were established for more than *five* years are counted.

Village-level measures of institutional environment

In addition to the above set of individual-level variables are contextual variables that control the economic development and institutional environment. The core question that motivates the analysis is whether the relative net returns to education, party membership, and kinship capital vary by level of economic development or in qualitatively different types of local institutional arrangements.

The following village-level measures are drawn from the village survey to indicate the extent of a village's economic development and industrialization. *Annual income* refers to the village's per capita average net income. This is an overall measure of level of economic development and does not take into account the structure of the local economy. *Industrialization and Commercialization* is a dummy variable, gauging the structural change that defines economic development in a village by reference to the most important sector (agricultural, industry, and tertiary industry) of the village economy (1 if industry or tertiary industry; 0 if agricultural). *Requisition of farmland* is also a dummy variable that specifies whether the village's farmland was ever requisitioned by the state over the past ten years. This is another index to show the structural change of economic development.

Agricultural income, the average proportion of household income that is derived from agricultural sources, is computed from the individual responses in each of the sampled villages. It ranged from those almost wholly dependent on agriculture (0.96)

to those that have moved entirely out of agriculture (0.00). *Outgoing labors* measures the extent of absentee laboring population by reference to the proportion of the village laboring population engaged in nonfarm work outside the village. The higher the proportion of off-village nonfarm workers, the greater the extent of the village's reliance on outside nonagricultural income. *Immigrant labors* measures the extent of immigrant labors by reference to the proportion of the village laboring population migrating from other villages or provinces.

Three village-level variables are employed to assess the property rights arrangements in a village. *Private output* gauges the relative importance of private entrepreneurship in the village. It is defined as the proportion of output contributed by individual and private enterprises. The lowest value is 0; the highest is 1; and the average village derives 25 percent of its village output from individual or private production. To sophisticate the measurement, another dummy variable, *private entrepreneur economy*, is used to specify whether any of the largest four enterprises in the village are privately owned (1 if yes; 0 if no). *Public infrastructure* gauges the contribution of the village administration in providing social services and infrastructure, and is defined as the sum of expenditures on relevant items, including education, infrastructure, birth planning, subsidy for cadres' pension, medical allowances, pension, subsidy for the elders' association, stipend for soldiers' families, and environmental sanitation and greening. It ranged from 0 to 25 million yuan, with an average expenditure of 69,641 yuan (standard deviation is 250,945 yuan), indicating a wide disparity in Chinese villages.

In addition to village-measures of economic context, this study also examines the contextual effects brought about by political and social institutions. *Democratization* measures the institutionalization of villagers' committee elections. It is a dummy variable (1 if democratic; 0 if undemocratic) and defined as whether the following four conditions are all met in villagers' committee elections: (1) multi-candidate election; (2) members of the election steering group are chosen by villagers' assemblies or villagers' representatives; (3) candidates are nominated by villagers, self-nomination, or "sea elections" (open nominations ; 海選); and (4) formal candidates are decided by villagers or villagers' representatives.

Ancestral worship is the variable that purports to measure the extent of clan

organization and kinship institution in a village. It is defined as the proportion of villagers that have divine or ancestral worship activities. The average village has 39 percent of its households holding divine or ancestral worship rites.

Dependent Variables

Elite mobility is the central theme of this study. *Cadre* and *Businesspeople* are dummy variables for individuals who serve as some kind of village cadre (村幹部), or are involved in business, including being self-employed and owning private firms. The omitted reference category is farmer and wage employees, including farmers working in local enterprises and outside the village.

In the analysis of village directors, the *village director* is a dummy variable for those who are elected as the current director of villagers' committee. The omitted reference group is composed of ordinary villagers who are farmers or peasant workers.

In the analysis of earnings determination, *household income* is drawn from the sum of a series of four income items in the questionnaire. Respondents were asked a series of four questions about the prior year's income, including earnings from crops, agricultural and nonagricultural sidelines, wage incomes from local or outside factories, and remunerations from village- or township-owned enterprises.

Model for Elite Mobility

After excluding observations whose information is missing on any of the variables used in the analysis, the working sample consists of 630 individuals in 162 villages. Of the 630 individuals, 4% were serving as village cadre by the time of the survey in 2002, and 9% were involving in business (做生意、經商) or establishing a private business.

Hierarchical logistic and multinomial regression analyses are employed to test hypotheses, drawing from hierarchical generalized linear models (HGLMs) (Raudenbush and Bryk 2002:291; Raudenbush et al. 2000). The models use "farmers" (including farmers and peasant workers) as the reference category for the dependent variable in the multinomial logistic regressions, thus contrasting those who are village

cadres with those who are farmers, and those who are businesspeople with those who are farmers.

An outcome with three response categories taps respondent's career. The responses are:

- 1 = "Village cadre";
- 2 = "Businesspeople";
- 3 = "Farmers or peasant workers."

HGLM uses the logit link function when the level-1 sampling model is multinomial. Define η_{mij} as the log-odds of falling into category m relative to that of falling into category M.

Specifically,

$$\eta_{mij} = \log [\phi_{mij} / \phi_{Mij}]$$

Where

$$\phi_{Mij} = 1 - \sum_{m=1}^{M-1} \phi_{mij}$$

In words, η_{mij} is the log odds of being in m-th category to M-th category, which is the "reference category." In the present study, η_{1ij} is the log odds of being in the "village cadre" category relative to the third category, "farmers or peasant workers." Similarly, η_{2ij} is the log odds of the "businesspeople" category to the third category, "farmers or peasant workers."

At individual level, *male*, *age*, *primary school*, *junior middle school*, *advanced schooling*, *party member*, and *kinship capital* are used as predictors, so that η_{mij} can be written as:

$$\begin{aligned} \eta_{mij} = & \beta_{0j(m)} + \beta_{1j(m)*} (\text{Male})_{ij} + \beta_{1j(m)*} (\text{Age})_{ij} + \beta_{3j(m)*} (\text{Primary school})_{ij} \\ & + \beta_{4j(m)*} (\text{Junior middle school})_{ij} + \beta_{5j(m)*} (\text{Advanced schooling})_{ij} \\ & + \beta_{6j(m)*} (\text{Party member})_{ij} + \beta_{7j(m)*} (\text{Kinship capital})_{ij} \end{aligned}$$

for $m = 1, 2$. For this example, with $M = 3$, there would be two level-1 equations, for η_{1ij} and η_{2ij} .

At the village level, *annual income, industrialization and commercialization, requisition of farmland, agricultural income, outgoing labors, immigrant labors, private output, private entrepreneur economy, public infrastructure, democratization, and ancestral worship* are used as predictors.

The level-2 model has a parallel form:

$$\begin{aligned} \beta_{0j(m)} = & \gamma_{00(m)} + \gamma_{01(m)*} (\text{Annual income})_j \\ & + \gamma_{02(m)*} (\text{Industrialization and Commercialization})_j \\ & + \gamma_{03(m)*} (\text{Requisition of farmland})_j + \gamma_{04(m)*} (\text{Agricultural income})_j \\ & + \gamma_{05(m)*} (\text{Outgoing labors})_j + \gamma_{06(m)*} (\text{Immigrant labors})_j \\ & + \gamma_{07(m)*} (\text{Private output})_j + \gamma_{08(m)*} (\text{Private entrepreneur economy})_j \\ & + \gamma_{09(m)*} (\text{Public infrastructure})_j + \gamma_{10(m)*} (\text{Democratization})_j \\ & + \gamma_{11(m)*} (\text{Ancestral worship})_j + u_{0j(m)} \end{aligned}$$

$$\beta_{qj(m)} = \gamma_{q0(m)}, \quad q = 1, \dots, 7.$$

Thus, for $M = 3$, there would be two sets of level-2 equations. Furthermore, the random effects $u_{0j(2)}$ are constrained to zero for the sake of parsimony.

From the table we know that the intercept of the village cadre is the expected log-odds of a village cadre relative to “farmer or peasant worker” for a villager, holding all other variables constant and a random effect of zero. It is adjusted for the between-village heterogeneity in the likelihood of a village cadre relative to “farmer or peasant worker.” The estimated conditional expected log-odds is -6.400446.

The predicted probability that the same villager responds a village cadre (Category 1) is $\exp\{-6.400446\}/(1 + \exp\{-6.400446\} + \exp\{-3.694447\}) = 0.0016$. The predicted probability that the same villager gives a businessman response (Category 2) is $\exp\{-3.694447\}/(1 + \exp\{-6.400446\} + \exp\{-3.694447\}) = 0.0242$. Thus, the predicted probability of a farmer or peasant worker response (Category 3) for the same villager is $1 - 0.0016 - 0.0242 = 0.9742$.

The individual-level effects associated with a heightened odds of becoming a village cadre (relative to a farmer or peasant worker) include party member, advanced school schooling (relative to under primary school), and being male (all $p < 0.05$). One who has kinship capital in the village may have a heightened odds of becoming a village cadre, considering the estimated coefficient fails to reach statistical significance ($p = 0.084$). In predicting the odds of becoming a businessman (relative to a farmer or peasant worker), individual-level effects are found to be associated with a negative heightened odds in age ($p < 0.01$). One who is male ($p = 0.079$) or attended junior middle school (relative to under primary school) ($p = 0.056$) may have a relatively little heightened odds of becoming a businessman, although the estimated coefficients do not achieve statistical significance (both $p < 0.1$) (Table 2).

Switching to village-level economic context and institutional environment, controlling for the individual-level variables, one who resides in any village with more immigrant labors has higher log-odds of becoming a village cadre ($p < 0.05$). On the other hand, when all the individual-level variables being equal, one who resides in any democratic village has a negative log-odds of becoming a village cadre than in undemocratic villages ($p < 0.05$). As for predicting the odds of becoming businesspeople, we find that village-level effects associated with a heightened odds include “industrialization and commercialization” and “requisition of farmland (both $p < 0.05$). One in any village with ancestral worship has a negative log-odds of becoming businesspeople than those who live in villages without ancestral worship

($p < 0.05$) . Other individual-level variables being equal, one in any village with more public infrastructure expenditure may have a heightened odds of becoming businesspeople, but the estimated coefficients do not achieve high statistical significance ($p = 0.084$) (Table 2).

[Table 1]

[Table 2]

Model for Villagers' Committee Director

The model in this part is a two-level model for binary outcomes: village director or farmer. The cases in this sub-sample are drawn from village directors in the village survey and farmers or peasant workers in the individual survey. In order to examine the effects of village electoral institutions, I distinguish villages between “democratic” villages and “undemocratic” ones, and employ HGLM model to assess the effects of variables.

In a democratic village, the individual-level effects associated with a higher odds of becoming a village director (relative to a farmer or peasant worker) is being a party member ($p < 0.001$). This conditional expected log-odds of a party member is $\exp\{3.45\} = 31.5$ times the odds of retention of a villager who is not a party member, holding constant the other predictors in the model and the random effect.

In an undemocratic village, the individual-level effects associated with a heightened odds of becoming a village director (relative to a farmer or peasant worker) include party member, high education (relative to under primary school), older age and being male (all $p < 0.001$).

Looking at village-level economic context and institutional environment, controlling for the individual-level variables, all estimated coefficients do not achieve statistical significance no matter in democratic villages or undemocratic ones.

[Table 3]

[Table 4]

Model for income distribution

For the study of earnings inequality, at the individual-level, I model income as an outcome variable as the following:

$$\begin{aligned} \text{Income}_{ij} &= \beta_{0j} + \beta_{1j} X_{1ij} + \beta_{2j} X_{2ij} + \dots + \beta_{Qj} X_{Qij} + \gamma_{ij} \\ &= \beta_{0j} + \sum_{q=1}^Q \beta_{qj} X_{qij} + \gamma_{ij} \quad \gamma_{ij} \sim N(0, \sigma^2) \end{aligned}$$

Where β_{qj} ($q=0,1,\dots,Q$) are individual-level coefficients, and X_{qij} are individual-level predictors for case i in village j , and γ_{ij} is individual-level random effect of each individual and is assumed to be independent and normally distributed with a variance of σ^2 . We use group-centered independent variables at the level. So β_{0j} becomes the group mean income for individuals in the j th village.

At the village level, we treat individual-level coefficients as outcome of the village-level variables and the model as the following:

$$\begin{aligned} \beta_{qj} &= \gamma_{q0} + \gamma_{q1} W_{1j} + \gamma_{q2} W_{2j} + \dots + \gamma_{qs} W_{sj} + u_{qj} \\ &= \gamma_{q0} + \sum_{s=1}^{S_q} \gamma_{qs} W_{sj} + u_{qj} \end{aligned}$$

Where γ_{qs} ($q=1,\dots,S_q$) are village-level coefficients, and W_{sj} ($s=1,\dots,S_q$) are village-level predictors, and u_{qj} is the village-level random effect which is assumed to be independent and normally distributed with a variance of τ .

In this study, for statistical efficiency and computational stability, it would be sensible to constrain the residual parameter variance for this individual-level coefficient to be zero (Bryk and Raudenbush, 2002).

The model 1 on table 6 shows the null hypothesis is highly implausible ($p<0.001$), indicating significant variation does exist among villages in their annual total earnings. The intraclass correlation $=0.146/(0.146+0.865)= 0.144$, indicating that 14.4% of the variance in annual total earnings is between villages.

The model 2 on table 6 shows the null hypothesis is highly implausible ($p<0.001$), indicating significant variation does exist among villages in their annual

total income. There exists a significant positive association between annual total income and the village's average annual net income per capita ($p < 0.001$), although the effect is very little. Also, a highly significant negative association appears between annual total income and agricultural income ($p < 0.001$). Comparing with model 1, proportion of variance = $(0.146 - 0.103) / 0.146 = 0.295$, indicating 29.5% of the true between-village variance in annual total income is accounted by average annual net income per capita and agricultural income in the village level.

From the model 3 on table 6, we can see gender, occupations, party member, and kinship capital are not significantly associated with annual total income, so we drop them and rerun the model. From the model 4, we can see many variables showing a highly significant positive association with annual total income including junior middle school (relative to under primary school), advanced schooling (relative to under primary school) and social capital (all $p < 0.05$). But one's age has a highly significant negative association with his or her annual total income.

From the mode 5, we combine model 2 and model 4, considering all factors, the outcome is almost the same. The conclusion is: at individual level, one's age, education, and social capital all contribute significantly to his/her annual total income; at village level, one who resides in any village with higher average annual net income per capita may have higher annual total income, but one who resides in any village with higher relatively agricultural income may have lower annual total income.

[Table 5]

[Table 6]

A summery on findings

The empirical results for this study are very informative and would be elaborated in a later version of this paper. Here the findings are summarized as follows.

All individual-level and village-level conditions being equal, factors that affect an individual to be a village cadre are male, advanced schooling, and party member. The village electoral institution has a significant effect on elite mobility. For example,

other things being equal, a party member would have relative less chance to be a village cadre in a democratic village.

The more industrialized or commercialized one village is, the more likely for its villagers to enter business career, holding other conditions being equal. The effects of education on one's entering business career are not significant if controlling for individual and village-level contextual factors.

There exist very different mechanisms for one to be elected as village director between democratic and undemocratic villages. In democratic villages, party membership is the sole factor to associate one being a village director. In undemocratic villages, in addition to party membership, all other individual characteristics (gender, age, and education) have effects on one's chance to be a village director. This difference deserves a closer examination and careful explanation. In a democratic village, villagers are allowed to elect competent candidates they trust. The characteristics of being capable and being trusted may not correlated with one's education, age, or gender. In today's Chinese democratic villages, township party officials still need to recruit capable villagers into the party. For a non-party member who was elected as village director, he/she was usually "invited" and "recruited" by township party leaders before or after the election. This is a "responsive" way of local governance in contemporary rural China.

As to income determination, the effect of social capital at individual level, which was not examined in previous literature, is significantly positive. There is no significant effect of occupations (being a village cadre or a businessperson relative to a farmer) on earnings, controlling for education and other variables. The village-level characteristics that affect one's household income are related to the village's economic development and structure. Holding all conditions equal, households in agriculture-dominated villages receive relatively less income than nonagricultural villages.

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Table1. Descriptive Statistics of Model for Elite Mobility

Individual-Level Variables						
VARIABLE	NAME	N	MEAN	SD	MIN	MAX
Male		630	0.52	0.50	0.00	1.00
Age		630	44.64	13.14	18.00	80.00
<i>Education</i>						
	Under Primary school	630	0.44	0.50	0.00	1.00
	Primary school	630	0.27	0.44	0.00	1.00
	Junior middle school	630	0.23	0.42	0.00	1.00
	Advanced schooling	630	0.06	0.24	0.00	1.00
	Party member	630	0.11	0.32	0.00	1.00
	Kinship capital	630	0.29	0.45	0.00	1.00
<i>Career</i>						
	Village cadre	630	0.04	0.19	0.00	1.00
	Businesspeople	630	0.09	0.28	0.00	1.00
	Farmers and peasant workers	630	0.87	0.33	0.00	1.00
Village-Level Economic Context and Institutional Environment						
VARIABLE	NAME	N	MEAN	SD	MIN	MAX
<i>A. Economic development</i>						
	Annual income	162	1,543	1,141	0.00	8000
	Industrialization and commercialization	162	0.15	0.36	0.00	1.00
	Requisition of farmland	162	0.30	0.46	0.00	1.00
	Agricultural income	162	0.45	0.23	0.00	0.96
	Outgoing labors	162	0.27	0.21	0.00	1.00
	Immigrant labors	162	0.03	0.09	0.00	0.70
<i>B. Property rights</i>						
	Private output	162	0.25	0.42	0.00	1.00
	Private entrepreneur economy	162	0.15	0.36	0.00	1.00
	Public infrastructure	162	69,641	250,945	0.00	2405000
<i>C. Political institutional environment</i>						
	Democratization	162	0.29	0.46	0.00	1.00
<i>D. Kinship institution</i>						
	Ancestral worship	162	0.39	0.35	0.00	1.00

Table2. Multinomial Multilevel Model for Elite Mobility

	Village cadre		Businesspeople	
	Coefficient	Approx. d.f.	Coefficient	Approx. d.f.
Village-Level Economic Context and Institutional Environment				
<i>A. Economic development</i>				
Annual income	-0.000	150	-0.000	150
Industrialization and commercialization	-2.291	150	1.077*	150
Requisition of farmland	0.169	150	1.472***	150
Agricultural income	-2.421	150	-0.698	150
Outgoing labors	-1.715	150	0.550	150
Immigrant labors	6.082*	150	-0.399	150
<i>B. Property rights</i>				
Private output	-2.617	150	0.366	150
Private entrepreneur economy	1.558	150	0.859	150
Public infrastructure	-0.000	150	-0.000+	150
<i>C. Political institutional environment</i>				
Democratization	-2.448*	150	-0.145	150
<i>D. Kinship institution</i>				
Ancestral worship	-0.644	150	-1.199*	150
Individual-Level Variables				
Male	2.237**	592	0.603+	150
Age	0.009	592	-0.039**	150
<i>Education</i> (under Primary school as reference group)				
Primary school	-1.006	592	-0.141	150
Junior middle school	1.058	592	0.825+	150
Advanced schooling	2.115*	592	0.511	150
Party member	2.685 ***	592	-0.505	150
Kinship capital	1.109+	592	-0.127	592
INTRCPT	-6.400***	150	-3.694***	150

“+” p<0.1 “**” p<0.05 “***” p<0.01 “****” p<0.001

The outcome variable is: 1) Village cadre, 2)Businesspeople, and 3)farmers and peasant workers.

Table 3. Descriptive statistics for democratic villages

Individual-Level Variables						
VARIABLE	NAME	N	MEAN	SD	MIN	MAX
Male		289	0.59	0.49	0.00	1.00
Age		289	44.72	11.63	18.00	76.00
Member		289	0.27	0.44	0.00	1.00
Village director		289	0.19	0.40	0.00	1.00
<i>Education</i>						
Under Primary school		289	0.36	0.48	0.00	1.00
Primary school		289	0.26	0.44	0.00	1.00
Junior middle school		289	0.26	0.44	0.00	1.00
Advanced schooling		289	0.12	0.33	0.00	1.00
Village-Level Economic Context and Institutional Environment						
VARIABLE	NAME	N	MEAN	SD	MIN	MAX
<i>A. Economic development</i>						
Annual income		63	1,736	1,281	100.00	8000
Industrialization and commercialization		63	0.16	0.37	0.00	1.00
Requisition of farmland		63	0.37	0.49	0.00	1.00
Agricultural income		63	0.44	0.25	0.00	0.90
Outgoing labors		63	0.20	0.17	0.00	0.79
Immigrant labors		63	0.03	0.08	0.00	0.41
<i>B. Property rights</i>						
Private output		63	0.36	0.47	0.00	1.00
Private entrepreneur economy		63	0.24	0.43	0.00	1.00
Public infrastructure		63	72,738	211,260	0.00	1402,864
<i>C. Kinship institution</i>						
Ancestral worship		63	0.30	0.36	0.00	1.00

Table 3. (Continued) Descriptive statistics for undemocratic villages

Individual-Level Variables						
VARIABLE	NAME	N	MEAN	SD	MIN	MAX
Male		633	0.57	0.49	0.00	1.00
Age		633	44.50	12.34	18.00	80.00
Member		633	0.21	0.41	0.00	1.00
Village director		633	0.18	0.39	0.00	1.00
<i>Education</i>						
Under Primary school		633	0.37	0.48	0.00	1.00
Primary school		633	0.25	0.43	0.00	1.00
Junior middle school		633	0.27	0.45	0.00	1.00
Advanced schooling		633	0.10	0.31	0.00	1.00
Village-Level Economic Context and Institutional Environment						
VARIABLE	NAME	N	MEAN	SD	MIN	MAX
<i>A. Economic development</i>						
Annual income		136	1,524	1,042	0.00	5,480
Industrialization and commercialization		136	0.15	0.36	0.00	1.00
Requisition of farmland		136	0.26	0.44	0.00	1.00
Agricultural income		136	0.47	0.24	0.00	1.00
Outgoing labors		136	0.26	0.22	0.00	1.00
Immigrant labors		136	0.03	0.09	0.00	0.70
<i>B. Property rights</i>						
Private output		136	0.24	0.41	0.00	1.00
Private entrepreneur economy		136	0.12	0.32	0.00	1.00
Public infrastructure		136	66,231	262,451	0.00	2405000.
<i>C. Kinship institution</i>						
Ancestral worship		136	0.38	0.35	0.00	1.00

Table 4. Multilevel Binary Model for Village Director

	Democratic Villages		Undemocratic Villages	
	Coefficient	Approx. d.f.	Coefficient	Approx. d.f.
Village-Level Economic Context and Institutional Environment				
<i>A. Economic development</i>				
Annual income	-0.000	52	-0.000	125
Industrialization and commercialization	-1.030	52	0.861	125
Requisition of farmland	-0.347	52	-0.299	125
Agricultural income	-2.033	52	0.360	125
Outgoing labors	-2.044	52	-1.085	125
Immigrant labors	7.210	52	-1.628	125
<i>B. Property rights</i>				
Private output	0.111	52	-0.544	125
Private entrepreneur economy	0.667	52	0.813	125
Public infrastructure	0.000	52	-0.000	125
<i>C. Kinship institution</i>				
Ancestral worship	0.403	52	-0.632	125
Individual-Level Variables				
Male	12.679	272	3.694***	616
Age	0.050	272	0.063***	616
<i>Education</i> (under Primary school as reference group)				
Primary school	11.867	272	3.518***	616
Junior middle school	14.478	272	5.006***	616
Advanced schooling	15.275	272	5.848***	616
Party member	3.45***	272	3.376***	616
INTRCPT	-28.477	52	-10.098	125

“+” p<0.1 “*” p<0.05 “***” p<0.01 “****” p<0.001

The outcome variable is village director (1 : Village director , 0 : Farmers and peasant workers)

Table5. Descriptive Statistics for Model of Income Distribution

Individual-Level Variables					
VARIABLE NAME	N	MEAN	SD	MIN	MAX
Annual total income	732	6857.47	7018.45	50.00	63000.00
Annual total income (logged)	732	8.41	1.00	3.91	11.05
Male	732	0.53	0.50	0.00	1.00
Age	732	44.34	13.00	18.00	80.00
<i>Education</i>	732	0.89	0.95	0.00	3.00
under Primary school	732	0.45	0.50	0.00	1.00
Primary school	732	0.26	0.44	0.00	1.00
Junior middle school	732	0.23	0.42	0.00	1.00
Advanced schooling	732	0.06	0.23	0.00	1.00
<i>Career</i>	732	2.84	0.46	1.00	3.00
Village Cadre	732	0.04	0.19	0.00	1.00
Businesspeople	732	0.09	0.28	0.00	1.00
Farmer and peasant worker	732	0.88	0.33	0.00	1.00
Party member	732	0.11	0.32	0.00	1.00
Kinship capital	732	0.28	0.45	0.00	1.00
Social capital	732	0.27	0.66	0.00	7.00

Village-Level Economic Context and Institutional Environment Descriptive Statistics

VARIABLE NAME	N	MEAN	SD	MIN	MAX
<i>Economic development</i>					
Annual income	191	1481.42	1112.01	0.00	8000.00
Agricultural income	191	0.45	0.23	0.00	1.00

Table 6. Multilevel Model of Income (logged)

	<u>Model</u>				
	1	2	3	4	5
Village-Level Economic Context					
<i>Economic development</i>					
Annual income		0.00***			0.00***
Agricultural income		-0.66***			-0.84***
Individual-Level Variables					
Male			0.12		
Age			-0.01***	-0.01**	-0.01***
<i>Education</i> (under Primary school as reference group)					
Primary school			-0.05	-0.03	-0.09
Junior middle school			0.23*	0.27**	0.22*
Advanced schooling			0.37*	0.38*	0.26+
<i>Career</i> (Farmer and peasant workers as reference group)					
Village Cadre			-0.11		
Businesspeople			0.21		
Party member			-0.01		
Kinship capital			0.11		
Social capital			0.17**	0.17**	0.19**
INTRCPT	8.42***	8.43***	8.25***	8.34***	8.40***
Variance Components					
INTRCPT	0.146***	0.103***	0.15***	0.15***	0.10***
Individual-Level	0.865	0.86	0.81	0.81***	0.80

“+” p<0.1 “*” p<0.05 “**” p<0.01 “***” p<0.001
 The outcome variable is logged annual total income.

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