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Estimating the Returns to Being a Local Official in Rural China

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ABSTRACT

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Recruiting and retaining leaders and public servants at the grass-roots level in developing countries creates a potential tension between providing sufficient returns to attract talent and limiting the scope for excessive rent-seeking behavior. In China, researchers have frequently argued that village cadres, who are the lowest level of administrators in rural areas, exploit personal political status for economic gain. Much existing research, however, compares the earnings of cadre and non-cadre households in rural China without controlling for unobserved dimensions of ability that are also correlated with success as entrepreneurs or in non-agricultural activities. The findings of this paper suggest a measurable return to cadre status, but the magnitudes are not large and provide only a modest incentive to participate in village-level government. The paper does not find evidence that households of village cadres earn significant rents from having a family member who is a cadre. Given the increasing returns to non-agricultural employment since China's economic reforms began, it is not surprising that the returns to working as a village cadre have also increased over time. Returns to cadre-status are derived both from direct compensation and subsidies for cadres and indirectly through returns earned in off-farm employment from businesses and economic activities managed by villages.

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I. Introduction

While individuals in leadership positions within the public sector may have intrinsic motivation to perform public and community service, convincing citizens to become leaders in their communities may require some expectation of financial return for time and effort (Liu and Tang, 2011). Apart from receiving reasonable financial incentives for public sector work, however, one may worry about negative consequences if leaders are perceived to exploit their position and connections for personal financial gain beyond reasonable compensation for the work they do on behalf of rural residents. Rural agrarian economies are not immune to the potential tension between providing appropriate incentives and the potential that leaders may engage in excessive rent-seeking. Goldstein and Udry (2008), for example, show that individuals holding powerful positions in local political hierarchies in Ghana have more secure tenure rights to cultivated land, and as a result, the political elite invest more and enjoy substantially higher output.[1]

In this paper, we use a large rural household panel data set covering 10 provinces across 16 years to examine the extent to which having a rural cadre as a household member contributes to earnings above and beyond those earned by non-cadre households.

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[1]A related literature examines how political status and connections may be used to raise personal income and/or the value of firms. Roberts (1990) took advantage of the unexpected death of Senator Henry Jackson to identify the value to others of the political connections to him. The share prices of companies with ties to the senator declined in reaction to his death; in contrast, share prices of companies with connections to his successor rose. Similarly, Fisman (2001) showed that the timing of the emergence of a string of rumors about the health of former Indonesian President Suharto was associated with a decline in the value of firms that had strong political connections with the Suharto family.

The paper contributes to a literature on the value and incentives of rural leaders in China, while demonstrating the importance of panel data and controlling for unobserved ability in estimating the returns to cadre status. While a preponderance of empirical studies to date have concluded that officials in rural China benefit from their political status and connections, the vast majority of these studies are based on single cross-sections of data and do not allow the researcher to control for unobserved dimensions of ability.[2] Higher incomes of cadres or Party members may not be driven by political connections, but simply the fact that high ability individuals are recruited into public service.[3] Li et al (2007), for example, demonstrate the importance that unobserved heterogeneity may play in biasing estimates of the returns to Communist Party membership in urban China. Using a set of data on 870 pairs of identical twins, the authors show that the apparent returns to Communist Party membership disappear after controlling for the effects of unobserved ability and family background.

Using the wide geographic coverage and the lengthy span of the survey, from 1986 to 2003, we examine both the geographic variation in returns to being in a rural cadre household and the evolution of returns during the period of transition from plan to market in rural China. By controlling for household fixed effects and exploiting the fact that we have information before and after households have a member who is a cadre, we control for unobserved ability, leadership and family background and obtain consistent estimates of the effect of cadre status on household income. Even if unobserved

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[2]A partial list of studies suggesting significant returns to local officials in rural China include Nee (1996), Cook (1998), Walder (2002), Morduch and Sicular (2000), Parish, Zhe and Li (1995) and Parish and Michelson (1996).

[3]Morduch and Sicular (2000) provide one exception among these studies in that they use a longitudinal data set (1990 to 1993), albeit from one county in Shandong province, to show that, after controlling for time-invariant unobservable factors, village cadre households earned approximately 20 percent more than non-cadre households.

characteristics of households vary over time, the household fixed effect model will greatly reduce the bias found in cross-sectional studies as long as the variation of the unobserved characteristics in a given household over time is small relative to the differences across households.

We find that cadre households earn an average of 90 yuan per capita (measured in 1986 yuan), or 9.5 percent, more than otherwise identical non-cadre households. This estimated return to cadre status is considerably lower than what has been found in the previous studies, especially in those based on a single cross-section of data. The return to cadre status appears to increase over time, in both absolute and relative terms, with the bulk of the increase occurring after 1998. Assuming that China's labor, product and credit markets have become more integrated over-time and administrative positions are less important to gain access to resources, as most scholars demonstrate (Xu, 2000; de Brauw et al., 2002; Dong and Xu, 2009), our results do not support that idea that returns to cadre status fall as the role of market mechanisms becomes more important (as argued by Nee, 1989). Our results are consistent with the notion that local governments must compete in the market for talent when attracting village leaders: the returns to cadre status are higher in both absolute and relative terms in relatively rich provinces than in poor ones. In Zhejiang, Guangdong and Jiangsu, the most developed provinces in China, the returns to cadre households are significantly higher than in the other provinces.

Local off-farm wage employment appears to be the source of two-thirds of the higher income earned by cadre households. Cadre households are more likely to have local off-farm employment while *less* likely to participate in migrant employment. Of the higher local wage income earned by cadre households, roughly two-thirds is from direct

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cadre compensation and subsidies for being a cadre, and one-third comes from businesses and economic activities managed by villages. In short, cadre status provides ability for the cadre or household member to earn more income from off-farm employment in village businesses and economic activities, but our results suggest that the magnitude of returns amounts to roughly three percent of income (after subtracting direct payments and subsidies associated with work as a cadre). Such a modest return hardly supports the notion of significant rent-seeking among grass-roots cadres in rural China.

Finally, any political capital or informational advantages associated with cadre status depreciates soon after cadres leave office.[4] The returns to cadre households disappear soon after the cadre member steps down from his or her office, indicating that most of the return to cadre status is attributable to the leadership position. The connections, social networks and informational advantages established through prior experience as a cadre do not seem to lead to a persistent return after leaving village government.

The paper is organized as follows. Section II briefly discusses the nature of grass-roots cadreship in rural China, focusing on the power and potential advantages of being a cadre during the reform era. Section III describes the data and Section IV describes our empirical strategy and key variables. Section V presents results of income regressions and Section VI examines the sources of higher income among cadre households. In Section VII the paper examines earnings after a household member "retires" from cadre status and discusses the depreciation of political capital and Section VIII concludes.

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[4]While much of the literature has focused on use of political influence to attract rents and to secure higher income, an alternative and indistinguishable explanation is that individuals in cadre positions may have better information about employment opportunities, and is then capable of making recommendations to family members.

II. The Evolving Roles of China's Rural Cadres

Who Are China's Rural Cadres? Cadres (*xiangcun ganbu*), who may be political or administrative leaders, hold the most important political positions in China's rural villages. Since the end of the commune system in the late 1970s and early 1980s, there have been two types of cadres in rural China: township cadres and village cadres. Township cadres hold a position in the township administration, reside in the village with their family and commute to the township to work, returning either daily or on weekends. Village cadres include members of the village committee (*cunmin weiyuanhui*) or village party committee (*cun dangzhibu*—Kelliher, 1997; Guo and Bernstein, 2004; Oi and Rozelle, 2000). Since the early 1980s these two governance bodies have been charged with implementing state policies and running village affairs.[5] The village committee typically consists of three to seven people, including the committee chair (who is often called the *village leader*), vice chair, village accountant and members who may be responsible for production, village security and women's affairs.[6] The other governance body, the village party committee, typically has three to five members, including a party

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[5] Which of the two governance bodies has more power over decision-making in village affairs and implementation of state policies is not clear-cut and varies over time and across villages. Before the introduction of village elections, the village party committee was the seat of decision-making and implementation and the party secretary was often considered to be the boss of the village. Since the introduction of village elections, however, village committees have effectively taken over power in some villages (Guo and Bernstein, 2004). The division of decision making power between the village committee and village party committee also varies across villages (Oi and Rozelle, 2000). For example, in some villages, regardless of the introduction of village elections, the village party committee, especially the party secretary, still makes most of the decisions while in some places power falls in the hands of the elected village committee. Alternatively, power-sharing arrangements may arise between the village committee and village party committee.

[6] Village committees appeared first in two Guangxi counties (Lishan and Luocheng) where they were formed by villagers without the knowledge of local authorities in late 1980 and early 1981 (O'Brien and Li, 2000). Village committees have spread widely since then. In 1982 village committees were written into the Constitution as elected, mass organizations of self-government. A year later a Central Committee circular instructed that elected village committees should be set up in villages. Although village committees are defined as elected, village elections were not widely implemented until the 1990s (Kelliher, 1997).

secretary, a vice secretary and one or more executive committee members at large.[7] The members of the two committees are considered as village cadres.[8] Village cadres may also include residents who are responsible for managing some aspect of village affairs but are not members of either the village committee or the village party committee. Such cadres may include residents responsible for village security (heads of the security office), army recruiting (heads of the militia), mediating civil disputes, distributing comfort funds or poverty assistance or organizing youths in the village (head of the Communist Youth League).

Township and village cadres serve in a part-time capacity and typically earn most of their income from other activities. While this greatly reduces the liability of the state, it also opens up the possibility that cadres may take advantage of their positions in ways that raise the income of their households. In the 1980s, during the early stages of economic reform, there were several channels through which cadres might have used their position to enrich themselves. First, as cadres managed the process of contracting out collective resources—such as land, equipment and its factories, they may have allocated the most fertile land, best equipment and relatively profitable enterprises to their own families at favorable prices (Oi, 1989). They also may have been able to wield power to receive benefits indirectly. For instance, cadres may have exacted bribes or

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[7] The size and composition of the village committee and village party committee may vary across villages, mainly depending on the village's size and complexity. The village party committee also can vary depending on the number of party members in the village. In some cases—especially in smaller villages, there can be an overlap of responsibilities. For example, in some villages there may be only a party secretary and a vice secretary, but no village party committee at all. In other places, the chair of the village committee is also the party secretary or vice secretary of the village party committee. The members of the two committees are often occupied by the same people.

[8] In some villages, there are sub-groups within the village, which are called village small groups (*cun xiaozu*) while in other places households were directly under village leadership. The leaders of village small groups at most maintain the rights to manage the cultivated land (in the sense that the small group leaders assign production rights to its small group households). In most cases, small group leaders can only act with the permission of village leaders. Hence, in many places power at the grass-roots level reside at the village level. The small group leaders are not generally considered as village cadres.

other gifts from villagers who were willing to pay for preferential access to the resources of the collective.

Second, given the underdeveloped state of markets in the early stages of the reforms, cadres continued to be responsible for rationing a subset of farming inputs. In the 1980s inputs, such as fertilizer and fuel, were often sold through state stores at below market prices if farmers were able to get access to rationing coupons from their village leaders (Oi, 1989). Access to these rationed goods was often a key to determining the profitability of agricultural production. As a result, cadres' incomes, or consumption, may have benefitted from preferential access to these scarce and cheap goods.

Third, in those rural areas with more robust local economies, cadres often managed township and village enterprises (or at least acted as managing consultants—Oi, 1999). Thus, they may have earned additional income or been able to help their family members get a job in one of the township and village enterprises (Ho, 1994; Parish, Zhe and Li, 1995; Parish and Michelson, 1996; Oi, 1999; Morduch and Sicular, 2000). These jobs were usually well paid, at least relative to farming, and in high demand by villagers. Township and village factories sometimes acted as satellite factories (or input suppliers of raw materials) for enterprises outside of the village and this relationship also may have been able to be used to get a family member a job in other enterprises.

Finally, being in the bureaucratic system may have given cadre households more advantages (at least over ordinary households) in becoming part of personal networks and in being able to develop personal relationships (*guanxi*) with upper level cadres (Oi, 1999). Through these networks, it is possible that cadre households gained private access to market information or technical expertise (Oi, 1999). Cadres then could have

employed these advantages to enhance the incomes of their own families. For example, a good relationship with upper level cadres may have facilitated access to credit from local banks to start up an own family business. Apart from access to higher-level bureaucrats and credit sources, households with cadres may have gained better information about local opportunities or new technologies that raised the profitability of businesses operated by cadres or their households.[9]

Recent Reforms and the Benefits of Cadre Status. Neither the economy nor the political organization of rural China has been static since the start of economic reforms. While cadres may have been able to exploit their positions in early stages of the reform, the evolution of institutions and maturation of markets could have changed the returns to cadre status during the 1990s and beyond. First, full implementation of elections for some cadre positions, such as village leader, may have also led to sanctions against cadres who sought excessive returns.[10] Second, state distribution channels for many inputs to farming withered (Park and Rozelle, 1998). Third, after the mid-1990s, under mounting competitive pressures, many local government officials, including village cadres, began to privatize their enterprises (Li and Rozelle, 2003). Once privatized, the ability of cadres to influence the employment decisions of the new owner likely declined and the ability to help family members obtain non-farm jobs may have also fallen. At the same time employment outside of villages and nearby towns—especially in China's cities—has

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[9] For a detailed description on the organization and administration of local governments (county, township and village) and their power and behavior in the post-Mao era, see Oi (1989 and 1999).
[10] Incomes grew at a slower rate in villages that were more unequal at the start of economic reforms, and this may well have reflected a political reaction of village residents to unequal outcomes reinforced by rent-seeking of local cadres ((Benjamin et al, 2011).

risen greatly, which substantially increased the opportunity of finding a job for those without connections to local employers.

Despite these changes, there are other reasons to believe that the power of cadres in rural China may not have weakened. For example, cadres may have shifted to managing, rather than directly operating, township and village resources and thus may still use their position to enhance their own income. Due to the rapid rate of urbanization in the late 1990s the value of land in some villages has risen. Since cadres are often managing both leasing and sales transactions, this provides a means of earning additional income legally (as compensation for collection of management or agency fees) or illegally (through kickbacks).[11]

The power and advantages held by cadres in rural China are likely to be quite heterogeneous across villages and to depend on the nature of the local village economy (Oi and Rozelle, 2000; Parish, Zhe and Li, 1995; Parish and Michelson, 1996). For example, in relatively poor and remote villages in which agriculture is the dominant source of income for households or in villages in which migration is pervasive, cadres may not have much power stemming from their official positions. On the other hand, in suburban villages or those in which there are many enterprises, cadres may be able to exploit their position to raise their incomes or to provide opportunities to family members. Finally, in those villages with many private firms, village leaders have the prospect of building mutually beneficial relationships with private enterprises by exploiting their quasi-regulatory power over firms. They are also still able to use personal relationships with upper-level cadres to help private entrepreneurs obtain loans or otherwise facilitate

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[11] Anecdotal evidence from some villages suggests that village cadres have earned income through rent-seeking activities in the process of land expropriations and other transactions (e.g., Cai, 2003; Guo, 2001).

both their business start-up and day-to-day operations. In return, private entrepreneurs may provide quid pro quo benefits to cadres or their family members.

Given the mechanisms through which village cadres in rural China may enhance their income, and the ways that markets and other institutions may have undermined these opportunities, we turn to the empirical question of whether or not cadres earn a return on their positions. Further, in an effort to understand whether any returns are excessive and may thus reflect rent-seeking, or simply sufficient to attracting talent to China's pool of rural cadres, we next estimate the source and magnitude of these returns. We address these analytical questions with the use of a unique panel of household survey data which we describe below.

III. Data

The analysis of the paper makes use of a large rural household panel data set that comes from annual household surveys conducted by the Survey Department of the Research Center on the Rural Economy (RCRE) at the Ministry of Agriculture in Beijing. To sample households, RCRE first selected counties in the upper, middle and lower income terciles in each of the 31 provinces and administrative regions in China. A village in each county was then randomly selected. Depending on the village population, between 40 and 120 households were randomly chosen and surveyed in each village. RCRE started the household survey in 1986 and intended a longitudinal survey,

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following the same households over time. As a result, there is a significant panel dimension to the household sample.[12]

The scope of the survey is quite broad. Households are asked a range of questions regarding political status (e.g., household cadre status), education, sources of income, labor supply, land use, asset ownership, occupational choice and other household characteristics. Respondent households keep daily diaries of income earnings and expenditures and a resident survey administer/enumerator living in the county seat visits with households once a month to collect information from the diaries.

The data set used in our analysis comes from part of the complete RCRE survey.[13] It covers ten provinces (Shanxi, Jilin, Jiangsu, Zhejiang, Anhui, Henan, Hunan, Guangdong, Sichuan and Gansu) and spans the period 1986-2003 except 1992 and 1994 as RCRE was unable to conduct the survey in these years because of funding difficulties. As a result, the data set includes 14,417 households and has a total of 123,867 household-year observations. RCRE's sampling is not proportional to provincial rural population. For example, the number of households surveyed in Sichuan is nearly the same as that surveyed in Gansu, despite the fact that Sichuan has a rural population that is nearly five times larger. Thus, in the descriptive statistics presented, we weight by rural population

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[12]Despite the significant panel dimension, nearly one third of originally selected households were lost to attrition during the period 1986-1999. This is mainly due to village attrition that occurred during two two-year gaps when RCRE was unable to conduct the survey in 1992 and 1994 because of funding difficulties. To supplement the sample, RCRE replaced lost villages by comparable villages in the same counties. Households lost through attrition were replaced (at least in principle) on the basis of random sampling. For a detailed discussion of the RCRE panel data set, including discussions of survey protocol, sampling, attrition, and comparisons with other data sources from rural China, see Benjamin, Brandt and Giles (2005). Other work exploiting the panel nature of this dataset includes: Benjamin, Brandt and Giles (2011), which examines the relationship between village inequality and income mobility; Giles (2006) and Giles and Yoo (2007), which analyze the risk-management and risk-coping behavior of households; and de Brauw and Giles (2008a, 2008b), which look at the effects of village-level migration on educational investment and household welfare, respectively.

[13] The complete RCRE survey covers over 22,000 households in 300 villages in 31 provinces and administrative regions. We have obtained access to data from 10 provinces, or roughly one third of the RCRE survey.

(by year).[14] The large geographic coverage and the lengthy span of the survey enable us to examine both the returns to a household of having a rural cadre and the variation of these returns across regions and time.

IV. Empirical Framework

To examine the relationship between rural cadre status and household income, we estimate a series of income functions, where the dependent variable, Y_{ijt}, is household income *per capita* for household i in province j in year t:

$$Y_{ijt} = \mu_i + \delta_{jt} + \beta Cadre_{ijt} + \sum_{k=1}^{K} \mathbf{X'}_{ijtk} \, \gamma_k + \varepsilon_{ijt} \qquad (1)$$

In this specification, variable $Cadre_{ijt}$ is the rural cadre status variable for household i in province j in year t, and is equal to one if a member of the household was a rural cadre in year t, and zero otherwise. The coefficient on this variable, β, measures the per capita magnitude of economic returns attributable to presence of a cadre, holding other things constant. A vector of household level variables, $\mathbf{X}_{ijtk}$, control for observable household characteristics, and unobservable household characteristics, such as ability and family background, are captured in μ_i. Also province*year fixed effects, δ_{jt}, control for all macro economic shocks at the level of the province. As it is likely that

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[14]Specifically, weight = provincial rural population / number of households sampled in a province.

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$corr(\varepsilon_{ijt}, \varepsilon_{ijs}) \neq 0$, for $t \neq s$, because income shocks could have persistent effects, we present cluster-corrected standard errors at the household-level throughout.[15]

An important and likely source of endogeneity associated with the cadre status variable ($Cadre_{ijt}$), derives from the presence of household level unobservables (μ_i). Specifically, we must be concerned that ability, family background and other intangibles, may be correlated with the cadre status variable ($Cadre_{ijt}$) and contribute to higher earnings of cadre households. Given the panel nature of the dataset, it is straightforward to control for these unobservables by including household level fixed-effects models.

Below we define and briefly describe the variables included in our regressions.

Measurement of Household Income. Household income can be classified into two groups: earned and unearned income.[16] Household earned income is the sum of income from all household-managed activities (i.e., agriculture, farming sidelines, and family-run business), plus off-farm income from local wage employment, temporary migrant wage employment, and government employment.[17] Household unearned income is the sum of formal transfers from the village and higher levels of government, informal transfers and remittances from friends or family, and other income and is calculated gross of taxes and fees. Both earned and unearned income are calculated on a per capita basis.

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[15] Equation (1) is essentially a regression version of Differences-in-Differences estimation. This form of serial correlation will not necessarily bias coefficient estimates, but may introduce downward bias in standard error estimates (Bertrand, Duflo and Mullainathan, 2004)

[16] For a detailed description on the definition and calculation of household incomes, see Appendix I of Benjamin, Brandt and Giles (2005).

[17] In addition to the income from temporary migrant wage employment, households may also have income from permanent migrants. We define this income as remittance and classify it as unearned income.

With regard to the calculation of household income, it is further worth mentioning that the value of farm output that is not sold and thus largely consumed (or stored) by the household is calculated at market prices and included as part of household income. Second, household incomes are deflated into 1986 prices, the first year of the RCRE survey, using the National Bureau of Statistics rural consumer price index for each province.

Rural Cadre Status. The measure of the political status used in our analyses is cadre status, which is constructed from a question of whether a member of the household was a township or village cadre (*xiangcun ganbu*). Despite the simplicity of the survey question, the question provides a signal as to which households in each village are politically powerful.

Covariates. All models estimated include the households' weighted average years of education, share of laborers with special skills, productive assets per capita, arable land per capita, share of laborers and share of male laborers. Weighted average years of education and share of laborers with special skills help crudely to control for human capital. Share of laborers and share of male laborers are included in the regressions to control for household demographic characteristics that could affect household income. Finally, households' Communist Party membership is also included in our regressions to control for another measure of political status in rural China that could affect household income.

V. Cadre Status and Household Incomes

Table 1 presents summary statistics of household characteristics of the sample. On average, households have 6.4 years of education. In addition, arable land per capita for a typical household is 1.36 *mu* (or 0.09 hectares) while productive assets per capita are 470 Yuan. Fourteen percent of the households have a Communist Party member and, on average, 4.61 percent of rural households have either a township or village cadre. The average cadre tenure for households for cadre members is three years, but in the RCRE data source, some are cadre households for as long as16 years and others for only one year. It is important to note that the village committee chair and village party committee chair tend to stay in their positions for much longer than other cadres, such as village accountants or heads of the village security office.

The statistically significant higher average income per capita, both earned and total, of cadre households relative to non-cadre households is evident from direct comparisons shown in Table 2. Over the entire period from 1986 to 2003, the average per capita income of cadre households was 28 percent more than that of non-cadre households (Panel A); and if we restrict attention to earned income per capita, earnings were 25 percent higher (Panel B). The higher average income of cadre households also demonstrates an interesting pattern over time (Figure 1, Panels A and B). First, the income gap appears to increase over time in both absolute and relative terms. Second, during the period 1995 to 1999 when a sharp decline in farm prices and cropping incomes occurred (Benjamin, Brandt and Giles, 2005), per capita income for non-cadre households actually fell while cadre households still experienced an average income growth rate of 2.4 percent per year, from 1,068 Yuan in 1995 to 1,173 Yuan in 1999.

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While such differences in average income may reinforce, at first blush, the perceptions of benefits to cadre status, it is important to realize that cadre and non-cadre households differ in important ways which may explain average differences in incomes. Table 3 shows that cadre households possess higher levels of human and physical capital, and this would lead us to expect differences in earnings, even apart from cadre status. After controlling for all of the observable household characteristics, and province-year fixed effects, cadre households earn an average of 109 Yuan of income more than non-cadre households, or 14 percent higher earning of cadre households relative to non-cadre households (Table 4). Observable household characteristics explain 39 percent of the observed differences between cadre and non-cadre households.

In common with the cross-sectional studies of the returns to cadre status, our base OLS results do not account for the unobserved dimensions of ability and we may expect that the coefficient on cadre status is biased upward. Including household fixed effects, in the last column of Table 4, leads to a decline in earnings premiums of cadre households to 89.5 Yuan, which is 11 percent of the average per capita income of non-cadre households, and represents an 18 percent decline in the estimated earnings premium of cadre households.

Our estimates above estimate contribution of cadre status to household incomes with income estimated in levels, rather than in logs. Though we do this for the simple reason that some households may have negative incomes in some years, results are not substantively different when estimating models in logs (Table 5).[18] The coefficient on the

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[18]Households reporting negative incomes typically have high gross incomes, but also high business-related expenses. Using log income as the dependant variable leads us to drop 294 household-year observations out of 123,867, or 0.24

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cadre status variable is positive and statistically significant at the one percent level. Estimated in logs, cadre households earn a 9.5 percent return over non-cadre households, after controlling for both the observable and unobservable household characteristics. While cadre households appear to earn a return from cadre status, it is important to note that our results demonstrate that the magnitude is relatively small, suggesting that the average cadre household in rural China does not use its positions to *greatly* enrich itself.[19]

Have the Returns to Cadre Status Declined over Time? As with descriptive patterns in the data, when we control for observable and fixed unobservable characteristics, we estimate models in which cadre status and year are interacted and find that the income returns to cadre households increased over time, regardless of whether income is measured in levels or logs (Table 6). For example, the income difference had increased fifteen-fold from 23 yuan in 1986 to 370 yuan in 2002. In relative terms, per capita income for cadre households in 1986 on average was 8 percent higher than that for non-cadre households while in 2002 it was 20 percent higher.[20] If China's market environment is improving over time, as most scholars demonstrate, our results are not consistent with the predictions of Nee (1989), who believed that cadre income would

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percent of the total sample. Thus, although regressions conditional on positive incomes are subject to selection bias (Angrist, 1999), it is reasonable to believe that the bias in this case is trivial.

[19] It is also of potential interest to ask whether observable household characteristics might have different impacts on income of cadre and non-cadre households. In Appendix Table 6, we interact the cadre-status variable with other important household characteristics. The only significant interactions are between cadre status and share of working age laborers in household and the interaction with male share of laborers. Increasing the shares of laborers and male laborers in a household bring cadre households more additional income than non-cadre households. In addition, our results show that the returns to education do not appear to be different for cadre and non-cadre households.

[20] In 2003 the income returns to cadre households actually fell from 370 Yuan in 2002 to 134 Yuan (Table 6). Despite this, they are still nearly six times bigger than those in 1986. In relative terms, the income returns to cadre households fell from 20 percent in 2002 of the average per capita income for non-cadre households to 7 percent and are slightly lower in 2003 compared to 1986 (i.e., 7.3 percent vs. 7.6 percent).

decline with economic reform. Much of the increase of the income gap between cadre and non-cadre households occurred after 1998 (Figure 2).

Do Cadre Households in Rich or Poor Provinces Earn Higher Returns? Our results show that the returns to being a cadre are higher in rich provinces than in poor ones (Table 7). In Zhejiang, Guangdong and Jiangsu, which are the most developed provinces in China, the returns to cadre status are 18, 14 and 10 percent, respectively. In contrast, returns to cadre status are less than 10 percent in all other provinces and often not statistically different from zero (Figure 3). This is not entirely surprising as the return to ability is likely to be higher in more developed provinces and thus the opportunity costs of time for would-be cadres are significantly higher. One would expect that cadres' remuneration should be higher in these provinces

Do Income Returns Understate the Returns to Cadre Status? As surveyed households may under report their incomes, particularly "grey" incomes that one might not wish to report, we examine the differences in household expenditures and financial assets between cadre and non-cadre households. Any economic benefits of being a cadre are likely to show up in household expenditure and financial assets, and important components of household expenditure, such as housing and durable goods are obvious to enumerators.

We implement the same econometric specification as for income, regressing measures of household expenditure, consumption and financial assets on cadre status along with control variables. The dependent variables, household expenditure and

financial assets, require some discussion. First, instead of using total consumption or expenditure, we separate housing and durables expenditure and non-durables consumption in our analysis and examine them separately. Second, we examine expenditures on households and durable goods rather than estimating the flow value of durable goods and housing consumed in a year.[21] Measuring expenditures is more appropriate for picking up any correlation between cadre status and accumulation of durable goods and housing. Finally, financial assets are calculated as the sum of deposits, cash in hand, investment outside of household managed businesses as well as net debt (lending less borrowing).

Our regression results suggest that cadre households appear to have higher consumption expenditure and own more financial assets than non-cadre households (Table 8). First, after controlling for observable household characteristics and time invariant unobservable, on a per capita basis, cadre households on average spend 40 Yuan more on non-durables consumption than non-cadre households. Second, there is no significant difference between cadre and non-cadre households in expenditures on housing and durable goods. Finally, cadre households report 142 Yuan more per capita in financial assets than non-cadre households.

The regression results lead to several important implications. First, as returns to cadre status show up in non-durable consumption, we might suspect that some of the additional income earned by cadres may be subsidizing expenditures related to the social role that they play. Second, in examining the effect of cadre status on household

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[21] Computing the flow of consumption from durables and housing, as in Benjamin et al (2005), is appropriate for calculating a measure of household welfare, but not appropriate if our aim is to pick up current expenditures that are likely related to higher earnings of cadres.

consumption expenditure and financial assets accumulation, the advantages of cadre households over non-cadre households are consistent with what we observe for the income measures. In common with income returns, there are positive correlations between cadre status and expenditures and asset accumulation after controlling for both observables and fixed household unobservables, but results from expenditure and asset accumulation models suggest only modest returns to cadre status.

Life-Cycle Effects. As our favored model does not include age or any other indicator of stage in the lifecycle, one might be concerned that the cadre variable in our regressions is picking up lifecycle effects. For survey data from the period from 1993 to 2003, the RCRE survey enumerated the age of the main household income earner (the definition used for household head) in the following categories: (1) below 31, (2) between 31 and 40, (3) between 41 and 50, (4) between 51 and 60, and (5) above 60. Appendix Table 1 presents the percentages of the households with the age of main laborer in each of the five categories. Specifically, 35 percent of the households have their main laborers with the age between 41 and 50 while 29 percent of the households between 31 and 40 and 20 percent between 51 and 60. Moreover, cadre and non-cadre households appear to differ greatly in the share of households between 41 and 50. While 45 percent of cadre households have their primary income earner between 41 and 50 while only 34 percent of the non-cadre households fall in this age range. When we include indicator variables to control for age of the main income earner, we do not observe appreciable differences in the returns to cadre status (Appendix Tables 2 and 3). First, when including the age variables in the regression, the point estimate of cadre households rises to 102 yuan,

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which is somewhat greater than the 90 yuan benefit without the lifecycle variables (Appendix Table 2). Second, *local* off-farm wage employment continues to be the only source for the income returnto cadre households (Appendix Table 3).[22]

VI. What Is the Source of Higher Earnings of Cadre Households?

When examining the income return to cadre households by income source, our regression results show that off-farm wage employment appears to be the only source from which the income returns to cadre households come (Table 9). The coefficient on the cadre status variable for off-farm wage employment appears to be the only coefficient that is statistically significant. The coefficient on cadre-status for off-farm wage employment is about 69 Yuan, which accounts for more than three fourths of the income premium of cadre households. In contrast, the contributions by agriculture, agricultural sidelines, family-run non-farm businesses and unearned income only account for about six, five, 10 and three percent, respectively, and they are not statistically different from zero.

When we further disaggregate off-farm wage employment into local, temporary migrant and government/government-paid employment, it turns out that *local* employment is the channel through which cadre households appear to earn additional

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[22] We also assess the robustness of our findings in a number of ways. First, we examine the relationship between earned income and household cadre status. Our results show that the measured income advantage of cadre households is about the same regardless of our using total or earned income. Second, we examine whether household specific time trends may have driven our results. To do so, we run a household fixed effects regression for each province with household specific time trends included. The results show that it is unlikely that our results have been driven by household specific time trends. The regression results are available upon request from the authors.

income (Table 10). [23] Holding other things constant, on a per capita basis, cadre households on average earn about 107 Yuan more than non-cadre households in local off-farm employment. In contrast, interestingly, we find an income disadvantage associated with the cadre status for temporary migrant employment. This is perhaps because cadre households have had to take time and effort to fulfill administrative duties and mandated tasks in the village, which may have reduced the availability of family labor for temporary migrant employment. In the case of government/government-paid employment, there do not appear to be any income differences between cadre and non-cadre households.[24] As such, in the subsequent analyses, we will focus on local and temporary migrant employment.

Cadre Status and Participation in Off-Farm Employment. Given the effect of the cadre status on wage earnings, it is interesting to know more about whether cadre status of a household member is associated with off-farm wage employment of a household member. To examine the correlation between cadre status and participation in off-farm wage employment, we use a linear probability model.

Our linear probability regression results show that cadre households are more likely to have off-farm wage employment (Table 11). On average cadre households are 14.2 percent more likely than non-cadre households to have family members with off-

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[23] Local employment refers to off-farm wage employment within the village while temporary migrant employment includes household members still resident in the village but who commute outside the village to work and return on weekends, as well as locally registered household members who work outside the village for a substantial portion of the year. Temporary migrant employment in most cases involves employment outside the township.
[24] Non-cadre households also could have family members who are employed by government. For example, some family members may be employed as school teachers paid by government, or janitors, office cleaners, security guards, and cooks at the township government. In most cases, they are hired on an as-needed basis. It is important to note that they are not part of the cadre system.

farm wage employment. Second, when looking at the local and temporary migrant employment separately, cadre households are more likely to have a family member employed locally but *less* likely to be employed as migrants.

To What Extent do Cadre Subsidies Drive the Off-Farm Income Result? The income return to cadre households might be driven by the possibility that cadres receive wages or compensation from their administrative position while non-cadre households do not. Then the higher incomes of cadre households are mechanically related to the additional job that is performed. To address whether the income return reflects the contract that the cadre may have with the village, the most direct solution would be to further break down employers and sources of income. The design of the RCRE survey makes it difficult to separately observe the cadre wage. Specifically, additional wage income earned in a household with a cadre comes from two non-overlapping sections of the survey. The first is found in the local wage income category which includes compensation and subsidies from serving as a cadre. The second section with relevant information is in the "transfer from government category", which includes compensation and subsidies from government treasury for being a cadre.[25] As the compensation and subsidies from village coffers and the government treasury are lumped together in the RCRE survey with *other incomes* in the local wage income category and the transfer from the government treasury

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[25] Essentially these two components distinguish regular wages from cash and in-kind subsidies. The incomes for being a cadre are commonly called compensation and subsidies rather than wage because cadres do not work a fixed number of hours, but take time for village affairs besides managing their own family economic activities.

category, respectively, it is not possible to explicitly separate total income earned by being a cadre from other incomes.[26]

Nonetheless, it is important to examine whether the income gap between cadre and non-cadre households is simply driven by an employment contract. To do this, we examine the difference in local wage income between cadre and non-cadre households by source.[27] Specifically, given the design of the 1986-1991 waves of the RCRE survey, we are able to disaggregate local wage income into three components: (a) wage income from businesses and economic activities managed by villages, (b) subsidies, aid and fund from villages, and (c) wage income from the private sector. Component (b) includes compensation and subsidies for being a cadre along with aid and funds such as comfort funds to families of revolutionary martyrs, financial aid to families living in extreme

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[26] While we cannot explicitly calculate the wage income earned by cadres (i.e., the compensation and subsidies for being a cadre from both village coffers and government treasury), we are able to infer it under reasonable assumptions. Specifically, when comparing village subsidies, aid and funds between cadre and non-cadre households, we find that, on a per capita basis, cadre households earn an average of 60 Yuan per capita from this income component (i.e., 54.33+5.559 = 59.889) while non-cadre households earn about about six Yuan, which are aid and fund from villages and do not contain cadre compensation and subsidies (Appendix Table 7). Since there is no reason to believe that the village aid and fund are distributed systematically in favor of cadre households, we consider the difference of 54 yuan in village subsidies, aid and fund between cadre and non-cadre households to be the average compensation and subsidies for being a cadre from village coffers. Moreover, and again as we discussed above, the other part of compensation and subsidies for being a cadre is included among transfers from the government. Then, we also consider the difference of eight Yuan in the transfer from government between cadre and non-cadre households as the compensation and subsidies for being a cadre from government treasury. Taking these results together, we infer that, on a per capita basis, cadre households earn about 62 yuan of compensation and subsidies for being a cadre. Taking account of the average family size of five for cadre households in our sample, this means that the average cadre wage was about 310 Yuan (measured in 1986 Yuan) in the period of 1986 to 1991 (i.e., 62 * 5 =310). Our inference of the wage income earned by cadres appears to be reliable. To assess the reliability of our inference, ideally, we would draw a comparison with national/large-scale surveys on cadre wage income. Unfortunately, no such surveys are available. Instead, we put our inference in perspective by citing a number of studies, which survey cadre wage incomes in specific locations of China. Specifically, two studies show the cadre wage income to be 1510 Yuan in year 2003 in one county of Shannxi province and 4060 Yuan in 2006 in another county of the province while another study shows the average cadre wage income to be 2014 Yuan in 2003 in four counties of Hubei province (Peng and Zhang, 2003; Wang, 2004; Wang, Ning and Rae, 2008). When measured in 1986 Yuan, these cadre wage income numbers become 460, 1237 and 667 Yuan, respectively. Thus, taking into account the fact that per capita income in rural China during the period of 1986 to 2006 had increased by 150%, our inference of 310 Yuan does not seem to be at odds with these studies. It is important to note that, on a per capita basis, Communist Party membership households on average obtain only about 15 Yuan from village subsidies, aid and funds, which is much less than what is received by cadre households. This is consistent with the fact that since Communist Party membership households do not earn wage income for being a Communist Party members, the income from village subsidies, aid and funds for Communist Party membership households should be much less than that for cadre households.

[27] Since we show that local wage employment is the only source for the income return to cadre households, we only focus on local wage income here.

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poverty and village funds to families experiencing severe financial difficulties and hardship. While we acknowledge that some income from this source might not properly be considered local *wage* income, we show later that village aid and subsidies are negligible compared to household total local wage income. We take comfort that village aid and subsidies could not be obscuring our findings.

Our regression results show that the income gap between cadre and non-cadre households shown in the paper could not be simply driven by the fact that cadre households earn compensation and subsidies for being a cadre while non-cadre households do not (Table 12). Specifically, when looking at wage income from businesses and economic activities managed by villages, which do not contain compensation and subsidies for being a cadre, cadre households appear to earn about 25 Yuan more per capita than non-cadre households (Panel A). In contrast, and interestingly, cadre households do not earn more wage income from the private sector than non-cadre households. These results suggest that village businesses and economic activities contribute about one-third of the local wage income returns earned by cadre households. The remaining two-thirds of the local wage income returns come from compensation and subsidies for being a cadre, which are included in village subsidies, aid and funds. Thus two thirds of the wage increase is driven by direct compensation for cadre status, and not additional income related to work off-farm. Fixed effects estimates, which control for time-invariant unobservable heterogeneity, show qualitatively similar results (Panel B).

For the period of 1993 onwards, a change of the household survey questionnaire makes it impossible to separate cadre wage income from local wage income. Nevertheless, we are still only able to disaggregate local wage income into two income

components: (a) wage income from the collective under which cadre wage income is lumped together with other wage income and (b) wage income from the private sector. When examining the differences in the two components between cadre and non-cadre households, consistent with the findings for the period of 1986-1991, our regression results show that the income return to cadre households only comes from differences in wage income from collective and that there does not appear to be any income differences between cadre and non-cadre households in wage income from the private sector (Appendix Table 4).

Finally, the income return to cadre households should not be simply interpreted as political rents. As our empirical results show, cadres earn wage incomes from village businesses and economic activities in addition to wage income from being a cadre. In many cases they participate in the routine management of economic resources in their communities and contribute to managerial activities that likely increase the profitability and efficiency of collective businesses and enterprises. As a result, it may be inappropriate to view all of the income that cadres earn from these managerial activities as political rents.

Despite the several possible channels suggested in Section II in which rural cadres could increase the incomes of their own households during the transition from plan to market in rural China, our empirical results in this section show that *local* off-farm wage employment appears to be the only source from which cadres may earn a systematically higher income than non-cadre households. Further, our results show that only one-third of the local wage income premium earned by cadre households is associated with businesses and economic activities managed by villages while the remaining two thirds is associated

with direct compensation for work as a cadre. In short, our results indicate that in rural China cadre households may have some advantage from cadre status to in gaining privileged access to jobs in businesses and economic activities managed by villages, but these may derive from either political connections or the information advantages that come along with cadre status. These jobs were usually well paid relative to farming and in high demand by villagers. According to the RCRE panel data, this is the only source of higher incomes associated with cadre status in rural China.[28]

Relationship to Returns to Communist Party Membership. Cadre status and membership in the Communist Party are closely related in rural China. First, only Communist Party members can be inducted into the village party committee. Second, although the village committee (as opposed to village party committee) does not require its members to be a Communist Party members, being a Communist Party member helps one to be nominated to the village committee. In the early period covered by this survey, when the township government appointed village cadres, it typically gave priority to Communist Party members in the village. However, since the introduction of village elections, the village committee is elected by villagers and as a result it is not necessarily comprised of Party members.

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[28] One of the potential indirect benefits of being a cadre could be that being a cadre helps the other members of the family gain access to local off-farm employment or higher wages in such employment. If some of the benefited family members move out and form their own households and their income is no longer included in the cadre's own household income, then the long-term benefits of being a cadre will be understated by the income returns to cadre households shown in the paper. Unfortunately, since the RCRE survey was conducted at the household level and did not collect data on each family member and track each family member, we are not able to examine how being a cadre affects the incomes of other family members. However, to the extent that the family member does not move out and form his/her own household, any of the impacts of being a cadre on his/her incomes will be contained in per capita income of the cadre household.

Our data show that cadre status and Communist Party membership are closely related (Appendix Table 5). Specifically, 73 percent of cadre households are also Communist Party membership households while 27 percent of cadre households are cadres only. In addition, of the Communist Party households, 24 percent are also cadre households.

Communist Party membership is also a measure of political status and connections and it does not have the drawback of being associated with employment. Our regression results, in fact, yield a number of findings regarding separate returns to households with a member of the Communist Party. First, holding other things constant, households with a Communist Party member earn about 79 yuan (measured in 1986 yuan) or 7.1 percent more than non-Communist Party membership households. Second, similar to cadre households, *local* off-farm wage employment appears to be the only source from which Communist Party members earn higher income. Third, and different from cadre households, most of the income return to Communist Party membership households comes from businesses and economic activities managed by villages. Finally, similar to cadre households, Communist Party membership households do not earn more wage income from the private sector than non-Communist Party membership households. Finally, it is important to note that the returns to cadre-status shown in the paper do not simply reflect the return to Party membership, as we control separately for Communist Party membership as well.

VII. The Returns to Cadre Status and Depreciation of Political Capital

Further insight into the returns to cadre status may be gleaned from examining the returns to being a former cadre, or put differently, we ask whether and how fast the returns to being a cadre dissipate after leaving one's office. To address this question, we proceed along two dimensions. First, we examine how household incomes change when a cadre household changes status. To do so, we narrow down our sample to a subsample including the years when the household appeared to be a first-time cadre household during the period 1986 to 2003 covered by the data and the subsequent years when it was a non-cadre household. We also expand the sub-sample to further include the following subsequent years when the household alternates between a cadre and non-cadre household. We then apply household fixed effects regression to the two subsamples. If the political capital depreciates quickly, we should observe that the income of the cadre household decreases significantly when it becomes a non-cadre household.

Second, we examine the income differences between the households who had never been cadre households during the period 1986 to 2003 and the households who were once cadre households during the period.[29] Specifically, we examine a subsample including: (1) the households who had never been cadre households between 1986 and 2003 and (2) the years for cadre households when they were non-cadre households. We then apply robust OLS regression to the subsample.[30] The robust OLS regression is in fact subject to an upward bias since the once-cadre households may have some

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[29] It is likely that there are some households who were not cadre households during the period 1986 to 2003 but were cadre households before 1986. However, we are not able to identify such households.

[30] None of the households in the subsample have the cadre status although some were once cadre households. Thus, household fixed effects regression is not applicable since the once-cadre status variable is time invariant and will be dropped out of the household fixed effects regression.

unobservable household characteristics, such as higher ability, better leadership qualities and/or family backgrounds, which also could affect household income positively. Nevertheless, the robust OLS regression gives an upper bound on the estimate of the income differences between never-cadre and once-cadre households. If the political capital depreciates quickly, we should observe that there are no significant income differences between never-cadre households and once-cadre households.

Our results show that the political capital depreciates quickly and that any return to cadre status disappears after the transition to non-cadre household. First, our regression results show that the incomes of cadre households decrease significantly after they step down from their cadre positions (Table 13). Holding observables and fixed unobservables constant in household fixed effects models, income per capita of a cadre household decreases by 6.7 percent in the first year that it becomes a non-cadre household. The overall average income differences between cadre and non-cadre status is about 67 yuan, or about 8.3 percent in relative terms. These point estimates are comparable to, but somewhat smaller than, the overall income returns to cadre household status we estimated in Section III. Second, when comparing the incomes between never-cadre and once-cadre households, our results show that the income of those households who were once cadre households does not appear to be systematically higher than that for the households who had never been cadre households (Table 14). On average the once-cadre households earn only 15 Yuan more than the never-cadre households or about 3.2 percent more in relative terms.

Our results indicate that most of the return earned by cadre households are due to compensation associated with the position and connections while holding the position,

and that the connections and social networks established through prior experience as cadre do not raise household income significantly. These findings are consistent with a Chinese saying, which, especially popular among the Chinese bureaucrats: "when you leave your position, the cup of tea on your table soon becomes cold" as no one cares to keep pouring in hot water for you (*Ren Zou Cha Liang*).

VIII. Conclusions

Our results are consistent with Morduch and Sicular's (2002) argument for rural China and suggestions from the public sector management literature for urban areas (Liu and Tang, 2011), that is, for economic transition to succeed, rank-and-file officials should have positive incentives. The economic returns to cadre households provide an incentive for educated and high ability residents of rural China to serve as grass-roots officials and have motivated rural cadres to implement policy and institutional changes. Further, our results shed light on the implications of the transition from plan to market for the returns to political status and connections. We find no evidence, as proposed by Nee (1989), that the transition from plan to market would imply diminishing returns to cadres. Indeed, the returns associated with rural cadre status appeared to increase over the period from 1998 and 2003.

In addition, news reports on land expropriations notwithstanding, our results do not provide support for the view that corruption is rampant among grass-roots cadres in rural China. In spite of case studies, personal interviews and anecdotes showing that cadres in some villages have enriched themselves by taking advantage of their power (and even by using corrupt means, e.g., Guo and Bernstein, 2004; Li, 1999; Cai, 2003;

O'Brien and Li, 1995; Unger, 2000; Tsai, 2002), our results suggest only modest returns to cadre status, possibly through securing local off-farm wage jobs for household members. Once controlling for unobserved dimensions of ability of the household, the resulting income and consumption returns to cadre households are quite small relative to the income and consumption of non-cadre households.

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Table 1 Summary Statistics of Household Characteristics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Cadre (1=yes)	123,867	0.05	0.21	0	1
Length of Cadre Status (years)	1,966	2.93	2.87	1	16
Communist Party Membership (1=yes)	123,867	0.14	0.35	0	1
Weighted average years of education	123,867	6.37	2.60	0	12
Share of laborers with special skills	123,867	0.08	0.18	0	1
Arable land per capita (*mu*)	123,867	1.36	1.35	0	28.13
Productive Assets per capita ('000 yuan)	123,867	0.47	1.48	0	94.48
Share of laborers	123,867	0.63	0.21	0.13	1
Share of male laborers	123,867	0.53	0.21	0	1

Note: The number, 123,867, refers to the number of household-year observations while 1,966 refers to the number of household observations. That is, the data set includes 1,966 households who had been cadre households.

Table 2 Annual Per Capita Income of Cadre and Non-Cadre Households

Year	Overall	Non-cadre Households	Cadre Households	Income Difference	Percentage Higher than Non-cadre Households
A. Total income					
1986	617.1	614.1	691.8	77.7***	12.6
1987	664.4	659.5	767.0	107.5***	16.3
1988	682.2	678.1	770.2	92.2***	13.6
1989	622.7	617.6	739.8	122.2***	19.8
1990	637.0	632.8	732.7	99.9***	15.8
1991	631.4	627.0	725.2	98.2***	15.7
1993	731.8	719.4	984.1	264.7***	36.8
1995	922.4	915.3	1,067.6	152.3***	16.6
1996	880.4	873.0	1,015.3	142.3***	16.3
1997	883.6	872.8	1,100.9	228.2***	26.1
1998	863.1	850.2	1,117.7	267.5***	31.5
1999	880.0	865.2	1,172.9	307.6***	35.6
2000	948.7	931.0	1,295.3	364.3***	39.1
2001	953.3	937.2	1,262.0	324.8***	34.7
2002	1,057.4	1,036.1	1,524.4	488.3***	47.1
2003	1,081.3	1,067.7	1,342.9	275.2***	25.8
Overall	817.8	807.4	1032.8	225.3***	27.9
B. Earned Income					
1986	581.0	578.3	647.9	69.6***	12.0
1987	620.5	616.4	706.8	90.3***	14.7
1988	634.2	630.8	707.3	76.5***	12.1
1989	577.9	574.0	667.8	93.8***	16.3
1990	587.8	583.9	677.3	93.4***	16.0
1991	578.9	575.2	656.6	81.4***	14.1
1993	682.8	671.2	918.8	247.5***	36.9
1995	866.5	861.0	978.0	117.0***	13.6
1996	820.0	814.0	930.1	116.1***	14.3
1997	825.6	817.0	998.5	181.5***	22.2
1998	799.6	787.9	1,030.2	242.3***	30.8
1999	817.0	804.5	1,065.8	261.3***	32.5
2000	873.4	857.6	1,183.8	326.2***	38.0
2001	884.0	869.5	1,161.2	291.7***	33.5
2002	943.5	929.4	1,253.3	323.9***	34.8
2003	985.5	975.5	1,178.6	203.2***	20.8
Overall	756.6	747.9	935.0	187.1***	25.0

Note: ***, ** and * refer to 1%, 5% and 10% statistical significance level, respectively.

**Table 3 Comparison of Household Characteristics Across
Cadre and Non-cadre Households**

	Overall	Non-Cadre	Cadre	Diff.
Weighted Average Years of education	6.39	6.33	7.56	1.23***
Share of Laborers with Special skills	0.07	0.07	0.09	0.02***
Arable Land per Capita(*mu*)	1.20	1.21	1.19	-0.01*
Productive Assets per Capita ('000 Yuan)	0.48	0.48	0.55	0.07***
Working Age Laborer Share of Household	0.64	0.64	0.63	-0.01***
Male Share of Laborers	0.53	0.53	0.50	-0.03***

Note: ***, ** and * refer to 1%, 5% and 10% statistical significance level, respectively. Numbers may not foot due to rounding.

Table 4 Correlates of Household Total Income Per Capita

Covariates	Robust OLS			Fixed Effects
	(1)	(2)	(3)	
Cadre	225.3***	196.4***	109.4***	89.49***
	(32.12)	(24.76)	(24.93)	(20.06)
Communist Party Member			76.86***	79.02***
			(14.22)	(12.77)
Weighted Average Years of Schooling			30.74***	14.64***
			(1.456)	(1.356)
Share of Laborers with Special Skills			286.8***	116.6***
			(22.28)	(20.45)
Working Age Laborer Share of Household			584.6***	504.4***
			(20.01)	(18.88)
Male Share of Household Labor			-51.62***	84.50***
			(16.04)	(15.06)
Cons.	807.4***	433.5***	-116.5***	156.1***
	(6.308)	(10.12)	(20.85)	(18.51)
Province*Year Effects	No	Yes	Yes	Yes
Household Fixed Effects	No	No	No	Yes
Adjusted R-Squared	0.003	0.267	0.300	0.611
Observation	123,867	123,867	123,867	123,867

Note: Robust standard errors in parentheses. ***, ** and * refer to 1%, 5% and 10% statistical significance level, respectively. The data set includes 14,417 households and has a total of 123,867 household-year observations.

Table 5 Correlates of Log Total Household Income Per Capita

Covariates	Robust OLS			Fixed Effect
	(1)	(2)	(3)	
Cadre	0.240***	0.221***	0.117***	0.0951***
	(0.0210)	(0.0157)	(0.0154)	(0.0136)
Communist Party Membership			0.0874***	0.0710***
			(0.0101)	(0.00973)
Weighted Average Years of Schooling			0.0385***	0.0158***
			(0.00130)	(0.00126)
Share of Laborers with Special Skills			0.329***	0.155***
			(0.0157)	(0.0145)
Working Age Laborer Share of Household			0.682***	0.578***
			(0.0149)	(0.0138)
Male Share of Household Labor			-0.0958***	0.0797***
			(0.0145)	(0.0129)
Cons.	6.430***	5.906***	5.267***	5.709***
	(0.00572)	(0.0202)	(0.0241)	(0.0135)
Province*Year Effects	No	Yes	Yes	Yes
Household Fixed Effects	No	No	No	Yes
Adjusted R-Squared	0.005	0.306	0.368	0.623
Observations	123,573	123,573	123,573	123,573

Note: Robust standard errors in parentheses. ***, ** and * refer to 1%, 5% and 10% statistical significance level, respectively. The log income regressions dropped those observations with zero or negative incomes, and the resulted data set has a total of 123,573 household-year observations

Table 6
The Evolution of Household Per Capita Income Returns to Cadre Status

Variable	Linear Income Per Capita	Log Income Per Capita
Cadre*1986	22.68	0.0761***
	(31.20)	(0.0289)
Cadre*1987	26.01	0.0744***
	(29.14)	(0.0276)
Cadre*1988	27.36	0.0758***
	(29.07)	(0.0240)
Cadre*1989	25.92	0.0685***
	(28.79)	(0.0251)
Cadre*1990	38.52	0.105***
	(26.34)	(0.0229)
Cadre*1991	28.32	0.100***
	(23.16)	(0.0228)
Cadre*1993	102.4**	0.104***
	(43.41)	(0.0264)
Cadre*1995	37.64	0.0503*
	(41.62)	(0.0268)
Cadre*1996	-11.95	0.0387
	(32.54)	(0.0248)
Cadre*1997	51.26	0.0569*
	(37.44)	(0.0331)
Cadre*1998	84.54**	0.0929***
	(34.76)	(0.0267)
Cadre*1999	165.3***	0.135***
	(47.06)	(0.0332)
Cadre*2000	210.5***	0.144***
	(49.74)	(0.0344)
Cadre*2001	213.6***	0.159***
	(53.07)	(0.0293)
Cadre*2002	369.8***	0.199***
	(92.69)	(0.0374)
Cadre*2003	134.3**	0.0732*
	(71.86)	(0.0446)
Adjusted R-Squared	0.611	0.623
Observations	123,867	123,573

Note: Robust standard errors in parentheses. ***, ** and * refer to 1%, 5% and 10% statistical significance level, respectively. Control variables include household Communist Party membership, weighted average years of schooling, share of laborers with special skills, working age laborer share of household, share of male laborers and province*year and household fixed effects.

Table 7 Provincial Differences in the Return to Cadre Status

Variable	Linear Income Per Capita	Log Income Per Capita
Cadre*Zhejiang	357.9***	0.181***
	(135.2)	(0.0429)
Cadre*Guangdong	240.6***	0.135***
	(83.99)	(0.0342)
Cadre*Jiangsu	87.67***	0.0963***
	(27.01)	(0.0240)
Cadre*Jilin	22.37	0.0806
	(49.78)	(0.0499)
Cadre*Anhui	42.49*	0.0802**
	(24.91)	(0.0319)
Cadre*Hunan	43.32	0.0835**
	(34.15)	(0.0397)
Cadre*Henan	21.51	0.0974***
	(28.63)	(0.0317)
Cadre*Shanxi	33.73	0.0753**
	(31.33)	(0.0370)
Cadre*Sichuan	7.440	0.0550
	(53.72)	(0.0569)
Cadre*Gansu	-2.498	-0.0114
	(30.29)	(0.0572)
Adjusted R-Squared	0.611	0.623
Observations	123,867	123,573

Note: Robust standard errors in parentheses. ***, ** and * refer to 1%, 5% and 10% statistical significance level, respectively. Control variables include household Communist Party membership, weighted average years of schooling, share of laborers with special skills, working age laborer share of household, share of male laborers and province*year and household fixed effects. Provinces are listed in descending order of per capita income.

Table 8
Cadre Status and the Determinants of Non-durables, Housing and Durables
Expenditure and Financial Assets Per Capita

Variable	Non-durables Expenditure Per Capita		Housing and Durables Expenditure Per Capita		Financial Assets Per Capita	
	(1)	(2)	(3)	(4)	(5)	(6)
Cadre	46.48***	40.07***	32.57*	11.53	120.5*	142.3*
	(9.383)	(7.544)	(17.14)	(23.30)	(69.18)	(44.04)
Communist Party Membership	41.85***	40.99***	27.78***	23.30*	47.89	89.64**
	(5.728)	(5.172)	(9.386)	(13.79)	(50.47)	(45.17)
Weighted average years of education	12.84***	5.237***	11.24***	7.543***	17.35***	3.531
	(0.632)	(0.575)	(1.025)	(1.407)	(4.089)	(3.358)
Household Size	-28.61***	-30.12***	1.333	-5.622***	-16.57**	-54.81***
	(1.031)	(1.142)	(1.576)	(1.990)	(6.794)	(8.958)
Ratio of Males	-65.07***	19.10*	-6.410	73.97***	-38.97	113.1*
	(11.48)	(11.10)	(18.35)	(22.71)	(71.40)	(63.07)
Ratio of Dependents	-157.1***	-89.32***	-113.2***	-53.27***	-506.2***	-188.6***
	(10.03)	(8.552)	(15.43)	(15.86)	(88.62)	(66.59)
Cons.	374.3***	502.0***	29.80**	78.39***	362.7***	443.4***
	(9.483)	(8.882)	(14.39)	(16.05)	(66.57)	(64.09)
Province* Year Effects	Yes	Yes	Yes	Yes	Yes	Yes
Household Effects	No	Yes	No	Yes	No	Yes
Adjusted R-Squared	0.392	0.635	0.030	0.157	0.051	0.376
Observations	123,867	123,867	123,867	123,867	123,867	123,867

Note: Robust standard errors in parentheses. ***, ** and * refer to 1%, 5% and 10% statistical significance level, respectively.

Table 9
Determinants of Income Per Capita by Source

Variable	Total Income	Agriculture	Farming Sidelines	Family-run Non-farm Businesses	Off-farm Wage Employment	Unearned
Cadre	89.49***	4.968	4.041	9.219	68.68***	2.585
	(20.06)	(4.094)	(5.091)	(17.53)	(15.66)	(6.095)
Communist Party Membership	79.02***	-7.780**	7.395*	-8.735	72.35***	15.79***
	(12.77)	(3.128)	(4.163)	(8.938)	(10.53)	(3.968)
Weighted Average Years of Schooling	14.64***	-1.502***	-0.739*	4.569***	12.42***	-0.110
	(1.356)	(0.369)	(0.383)	(0.949)	(1.039)	(0.465)
Share of Laborers with Special Skills	116.6***	2.035	-14.50**	88.34***	39.11**	1.624
	(20.45)	(4.692)	(6.058)	(16.17)	(17.14)	(6.402)
Share of laborers	504.4***	83.85***	27.90***	34.64***	306.9***	51.11***
	(18.88)	(4.307)	(5.068)	(12.81)	(13.79)	(7.524)
Share of male laborers	84.50***	30.21***	9.857**	29.39***	24.11**	-9.075
	(15.06)	(3.794)	(4.355)	(10.11)	(11.01)	(7.602)
Cons.	156.1***	206.1***	44.86***	19.14	-121.8***	7.818
	(18.51)	(4.224)	(5.499)	(12.88)	(13.78)	(6.977)
Province*Year Effects	Yes	Yes	Yes	Yes	Yes	Yes
Household Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-Squared	0.611	0.569	0.462	0.506	0.554	0.225
Observation	123,867	123,867	123,867	123,867	123,867	123,867

Note: Robust standard errors in parentheses. ***, ** and * refer to 1%, 5% and 10% statistical significance level, respectively.

Table 10 Determinants of Wage Income Per Capita, by Source

Variable	Total Wage Income	Local Employment	Temporary Migrant Employment	Government/ Government-paid Employment
Cadre	68.68***	107.4***	-37.73***	-0.993
	(15.66)	(12.22)	(10.80)	(3.555)
Communist Party Membership	72.35***	55.11***	-3.092	20.33***
	(10.53)	(7.189)	(7.645)	(3.451)
Weighted Averages Years of Schooling	12.42***	5.995***	6.864***	-0.439
	(1.039)	(0.777)	(0.708)	(0.334)
Share of Laborers with Special Skills	39.11**	17.58	7.050	14.48***
	(17.14)	(12.51)	(11.44)	(3.628)
Share of Laborers	306.9***	71.34***	220.6***	14.94***
	(13.79)	(8.722)	(10.70)	(3.450)
Male Laborer Share	24.11**	21.11***	51.77***	-48.77***
	(11.01)	(6.799)	(8.369)	(4.287)
Cons.	-121.8***	8.971	-159.0***	28.16***
	(13.78)	(8.771)	(10.38)	(3.731)
Province* Year Effects	Yes	Yes	Yes	Yes
Household Effects	Yes	Yes	Yes	Yes
Adjusted R-Squared	0.554	0.503	0.444	0.488
Observations	123,867	123,867	123,867	123,867

Note: Robust standard errors in parentheses. ***, ** and * refer to 1%, 5% and 10% statistical significance level, respectively.

Table 11 Determinants of Off-farm Wage Employment
Linear Probability Models

Variable	Off-farm Wage Employment	Local Employment	Temporary Migrant Employment
Cadre	0.142***	0.284***	-0.0577***
	(0.0100)	(0.0119)	(0.0116)
Communist Party Membership	0.0529***	0.0706***	-0.0233**
	(0.00813)	(0.00865)	(0.00910)
Weighted Average Years of Schooling	0.0148***	0.0103***	0.0114***
	(0.00104)	(0.000964)	(0.00109)
Share of Laborers with Special Skills	-0.0430***	0.0175	-0.0451***
	(0.0122)	(0.0114)	(0.0131)
Laborer Share of HH	0.138***	0.0177*	0.256***
	(0.0111)	(0.0103)	(0.0120)
Male Share of Labor	-0.0469***	-0.0272***	0.0357***
	(0.0105)	(0.00918)	(0.0115)
Cons.	0.541***	0.428***	0.0953***
	(0.0116)	(0.0107)	(0.0124)
Province*Year Effects	Yes	Yes	Yes
Household Effects	Yes	Yes	Yes
Adjusted R-Squared	0.411	0.538	0.404
Observation	123,867	123,867	123,867

Note: Robust standard errors in parentheses. ***, ** and * refer to 1%, 5% and 10% statistical significance level, respectively.

Table 12 Determinants of Local Wage Income Per Capita, by Source

Variable	Total Local Wage Income Per Capita	Village Businesses and Economic Activities	Village Subsidies, Aids and Fund	Private Sector	Transfer from Government
A. Robust OLS Regression					
Cadre	78.71***	25.30***	53.82***	-0.411	7.870***
	(9.781)	(8.750)	(2.771)	(4.160)	(1.417)
Communist Party Member	31.85***	21.50***	9.395***	0.955	2.974***
	(5.739)	(4.887)	(0.911)	(2.849)	(0.554)
Adjusted R-Squared	0.136	0.168	0.143	0.040	0.021
B. Household Fixed Effects Regression					
Cadre	67.66***	29.80***	34.56***	3.291	3.766**
	(9.464)	(6.433)	(2.597)	(6.821)	(1.474)
Communist Party Member	40.32***	29.71***	9.294***	1.322	1.280
	(6.548)	(5.232)	(1.314)	(3.813)	(0.857)
Adjusted R-Squared	0.672	0.759	0.592	0.506	0.495
Observations	53,522	53,522	53,522	53,522	53,522

Note: Robust standard errors in parentheses. ***, ** and * refer to 1%, 5% and 10% statistical significance level, respectively. Control variables include household Communist Party membership, weighted average years of schooling, share of laborers with special skills, working age laborer share of household, share of male laborers and province*year and household fixed effects.

Table 13
Further Explorations of Determinants of Income Per Capita for Cadre Households

| Variable	Linear Income Per Capita		Log Income Per Capita	
	(1)	(2)	(3)	(4)
Cadre	44.79*	67.06***	0.0673***	0.0834***
	(26.69)	(24.75)	(0.0213)	(0.0172)
Communist Party Membership	87.16***	99.92***	0.0862***	0.101***
	(29.65)	(25.03)	(0.0268)	(0.0214)
Weighted averages years of education	24.57***	22.15***	0.0219***	0.0169***
	(5.964)	(5.087)	(0.00425)	(0.00374)
Share of Laborers with Special Skills	82.03	120.7**	0.100**	0.119***
	(63.65)	(60.78)	(0.0496)	(0.0459)
Share of laborers	592.0***	650.9***	0.599***	0.604***
	(82.77)	(71.63)	(0.0497)	(0.0414)
Share of male laborers	47.27	80.59*	0.0117	0.0464
	(53.70)	(47.02)	(0.0514)	(0.0421)
Cons.	44.40	-17.01	5.743***	5.733***
	(104.7)	(92.42)	(0.0661)	(0.0529)
Province* Year Effects	Yes	Yes	Yes	Yes
Household Effects	Yes	Yes	Yes	Yes
Adjusted R-Squared	0.635	0.662	0.672	0.675
Subsample	(1)	(2)	(1)	(2)
Observations	9,105	12,810	9,082	12,775

Note: Robust standard errors in parentheses. ***, ** and * refer to 1%, 5% and 10% statistical significance level, respectively. Subsample (1) includes all years from when a household appeared to have a cadre member through subsequent years when it was a non-cadre household. Subsample (2) further includes the following subsequent years when the household alternates between having and not having a cadre. Log income regressions dropped the observations with zero or negative incomes.

Table 14
Determinants of Income Per Capita
**for "Never-Cadre" and "Once-Cadre" Households**

Variable	Linear Income Per Capita	Log Income Per Capita
Once-cadre	15.34	0.0317**
	(21.01)	(0.0154)
Communist Party Membership	69.92***	0.0779***
	(15.30)	(0.0113)
Weighted Average Years of Schooling	31.36***	0.0389***
	(1.514)	(0.00137)
Share of Laborers with Special Skills	282.8***	0.337***
	(22.59)	(0.0166)
Share of laborers	568.0***	0.679***
	(20.34)	(0.0155)
Share of male laborers	-52.70***	-0.0917***
	(16.31)	(0.0151)
Cons.	-97.78***	5.273***
	(21.28)	(0.0257)
Year Effects	Yes	Yes
Province by Year Effects	Yes	Yes
Household Effects	N.A.	N.A.
Adjusted R-Squared	0.296	0.363
Observation	113,094	112,820

Note: Robust standard errors in parentheses. ***, ** and * refer to 1%, 5% and 10% statistical significance level, respectively. The subsample includes (1) the households who had never been cadre households between 1986 and 2003 and (2) the years for cadre households when they were non-cadre households.

Panel A: Total Income Per Capita
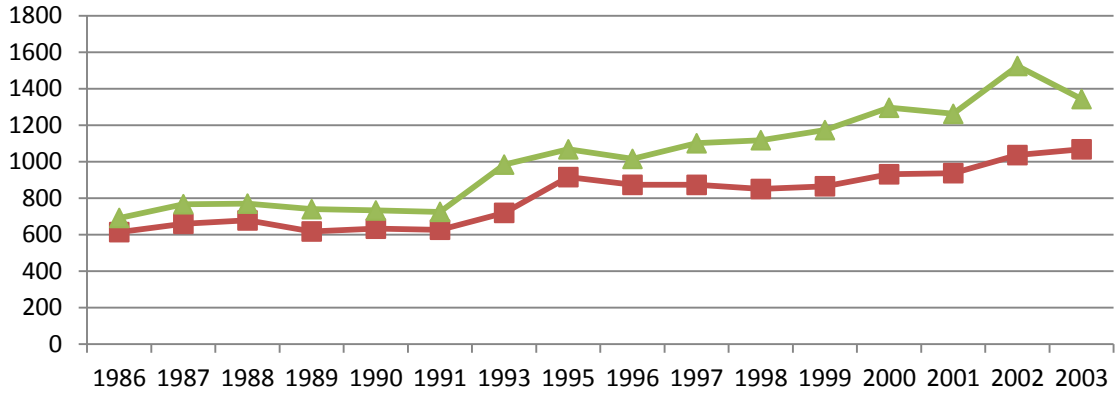
Panel B: Earned Income Per Capita
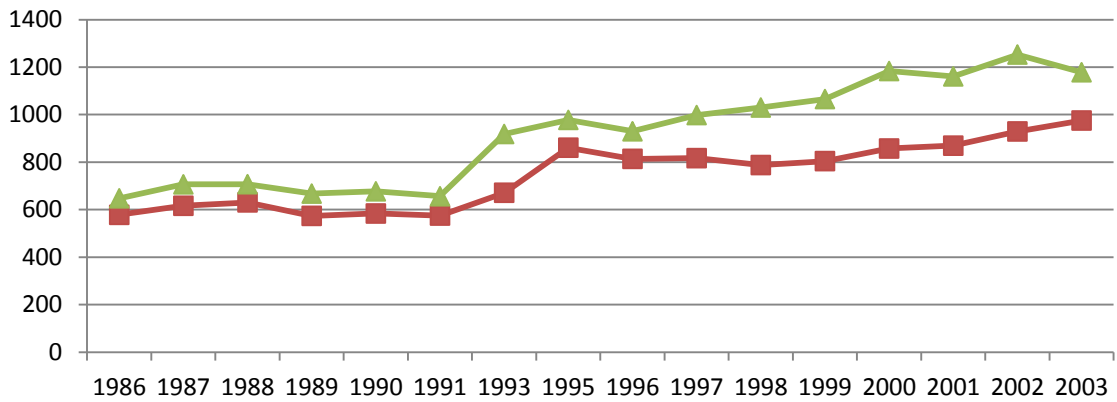
Panel C: Unearned Income Per Capita
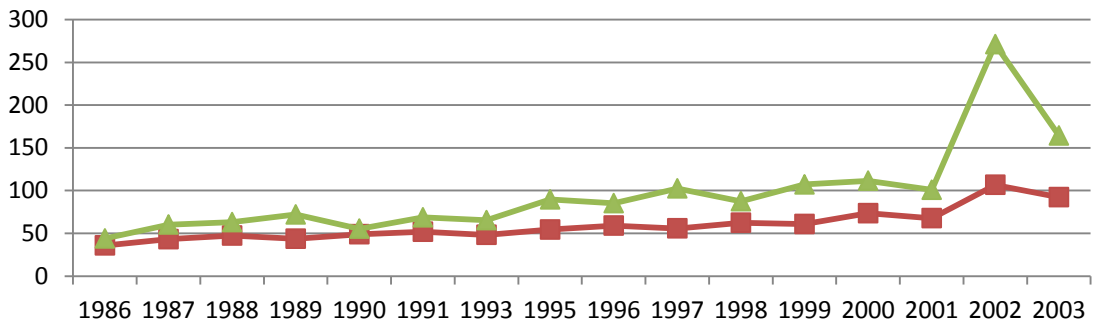
Non-cadre   Cadre

Figure 1 Annual Per Capita Income Differences of Cadre and Non-Cadre Households
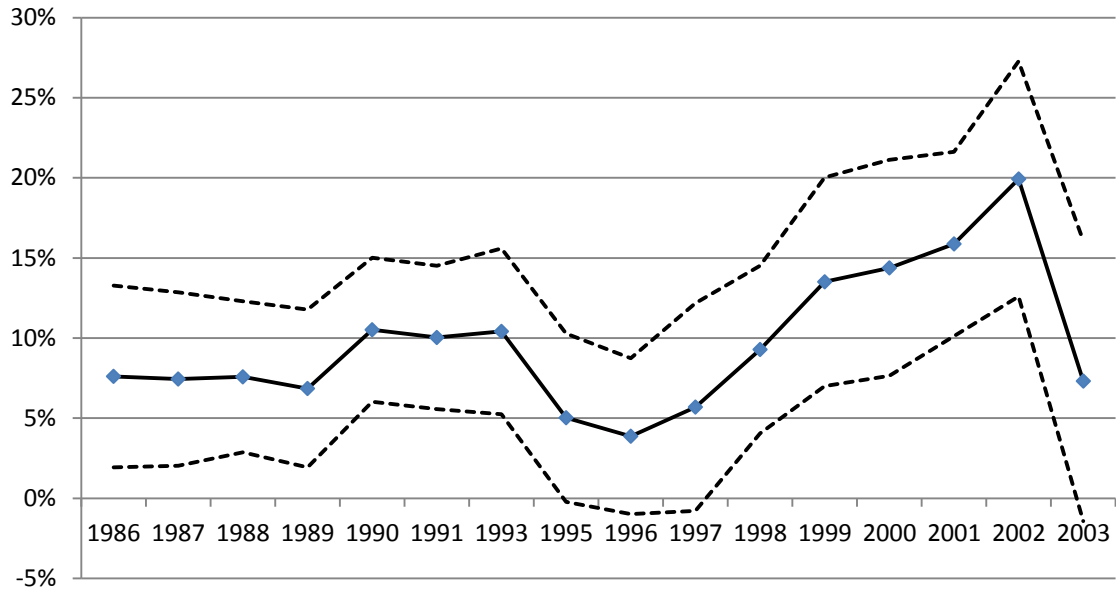
**Figure 2 Annual Income Return to Cadre Households over Time
with 95% Confidence Intervals**

Note: The graph was drawn based on the esimates of the income advantages of cadre households over years from Table 6 column 2.

Figure 3 Provincial Returns to Cadre Status
with 95% Confidence Intervals

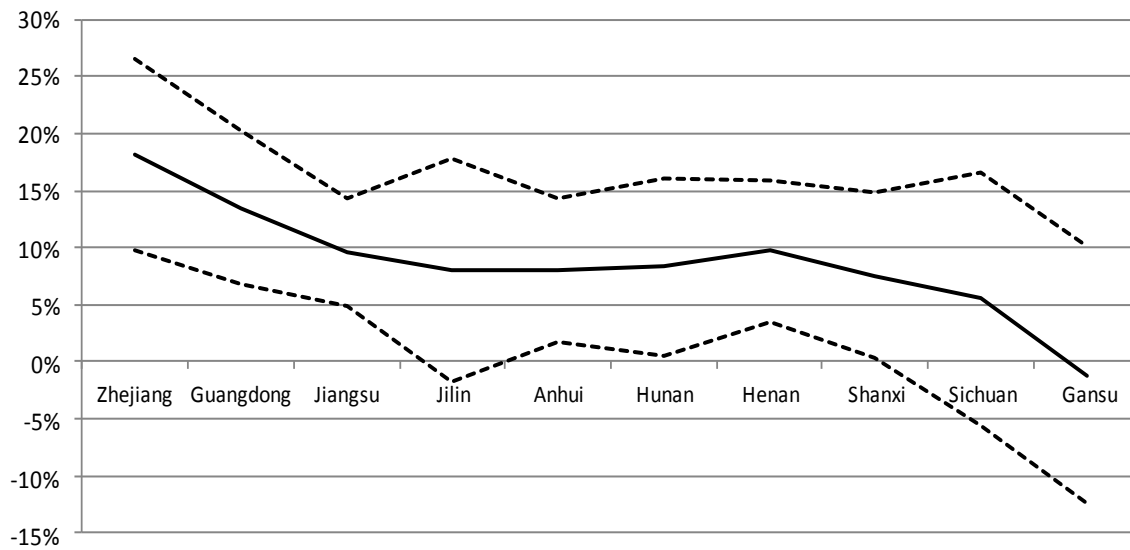Note: The graph was drawn based on the esimates of the income advantages of cadre households across provinces from Table 7 column 2. Provinces are listed from left to right in descending order of per capita income.

Appendix Tables

The Following Tables will be Available in an Electronic Working Paper

They Are Not Intended for Publication

Appendix Table 1
Age Differences between Cadre and Non-cadre Households

	Overall	Non-Cadre	Cadre	Diff.
Age of main laborer below 31 (1= yes)	8.9%	9.0%	6.0%	3.0%***
Age of main laborer between 31 and 40 (1= yes)	28.7%	28.8%	26.0%	2.8%***
Age of main laborer between 41 and 50 (1= yes)	34.7%	34.1%	45.4%	-11.3%***
Age of main laborer between 51 and 60 (1= yes)	19.9%	20.0%	18.9%	1.1%
Age of main laborer above 60 (1=yes)	7.9%	8.1%	3.6%	4.5%***
Total	100%	100%	100%	-

Note: ***, ** and * refer to 1%, 5% and 10% statistically significance level, respectively. The age variables are only available for the period of 1993 to 2002.

Appendix Table 2
Income Per Capita Regression by Source for 1993-2002

Variable	Total Income	Agriculture	Farming Sidelines	Family-run Non-farm Businesses	Off-farm Wage Employment	Unearned
Cadre	101.5***	3.284	4.165	36.84	56.25**	0.974
	(26.43)	(5.420)	(6.339)	(29.18)	(24.19)	(11.06)
Communist Party Membership	67.80***	-9.453**	12.78*	-11.34	66.42***	9.404
	(17.94)	(4.443)	(7.603)	(12.05)	(15.29)	(6.954)
Age of main laborer below 31 (1= yes)	87.24***	22.31***	-6.080	22.26	68.29***	-19.54
	(23.23)	(4.709)	(5.954)	(17.33)	(14.11)	(11.92)
Age of main laborer between 31 and 40 (1= yes)	77.18***	20.84***	8.903	31.45**	56.64***	-40.65***
	(18.88)	(4.264)	(5.587)	(13.13)	(12.67)	(9.780)
Age of main laborer between 41 and 50 (1= yes)	71.75***	26.26***	14.62***	26.49**	48.97***	-44.60***
	(19.03)	(4.220)	(5.651)	(13.16)	(13.23)	(9.769)
Age of main laborer between 51 and 60 (1= yes)	79.92***	16.85***	7.650	21.82	49.01***	-15.42*
	(18.16)	(4.007)	(5.089)	(13.31)	(11.73)	(9.241)
Cons.	127.2***	114.6***	71.81***	56.91**	-162.6***	46.49***
	(34.27)	(7.467)	(10.06)	(25.68)	(24.93)	(14.64)
Adjusted R-Squared	0.684	0.683	0.455	0.602	0.643	0.281
Observation	64,156	64,156	64,156	64,156	64,156	64,156

Note: Robust standard errors in parentheses. ***, ** and * refer to 1%, 5% and 10% statistical significance level, respectively. Control variables include household Communist Party membership, weighted average years of schooling, share of laborers with special skills, working age laborer share of household, share of male laborers and province*year and household fixed effects.

Appendix Table 3
Wage Income Per Capita Regression by Source for 1993-2002

Variable	Total Wage Income	Local Employment	Temporary Migrant Employment	Government/ Government-paid Employment
Cadre	56.25**	101.9***	-41.55**	-4.112
	(24.19)	(17.52)	(17.57)	(4.626)
Communist Party Membership	66.42***	36.41***	14.89	15.11***
	(15.29)	(11.77)	(10.96)	(5.414)
Age of main laborer below 31 (1= yes)	68.29***	9.634	60.51***	-1.851
	(14.11)	(10.02)	(11.15)	(3.624)
Age of main laborer between 31 and 40 (1= yes)	56.64***	11.53	50.40***	-5.300*
	(12.67)	(9.412)	(9.603)	(2.985)
Age of main laborer between 41 and 50 (1= yes)	48.97***	15.62	37.49***	-4.149
	(13.23)	(10.19)	(9.594)	(3.102)
Age of main laborer between 51 and 60 (1= yes)	49.01***	11.61	36.25***	1.156
	(11.73)	(8.483)	(9.027)	(3.167)
Cons.	-162.6***	5.878	-200.3***	31.79***
	(24.93)	(15.82)	(19.49)	(6.574)
Adjusted R-Squared	0.643	0.601	0.526	0.603
Observation	64,156	64,156	64,156	64,156

Note: Robust standard errors in parentheses. ***, ** and * refer to 1%, 5% and 10% statistical significance level, respectively. Control variables include household Communist Party membership, weighted average years of schooling, share of laborers with special skills, working age laborer share of household, share of male laborers and province*year and household fixed effects.

Appendix Table 4
Local Wage Income Per Capita Regression by Source for 1993-2002

Variable	Total Local Wage Income	Collective	Private Sector
A. Robust OLS Regression			
Cadre	147.5***	152.1***	-4.579
	(24.83)	(18.18)	(16.28)
Communist Party	59.51***	43.06***	16.45
Membership	(14.66)	(7.393)	(11.81)
Adjusted R-Squared	0.090	0.130	0.037
B. Household Fixed Effects Regression			
Cadre	101.4***	119.2***	-17.83
	(17.32)	(12.17)	(13.66)
Communist Party	36.03***	22.69***	13.34
Membership	(11.69)	(7.154)	(9.546)
Adjusted R-Squared	0.601	0.626	0.488
Observations	64,392	64,392	64,392

Note: Robust standard errors in parentheses. ***, ** and * refer to 1%, 5% and 10% statistical significance level, respectively. Control variables include household Communist Party membership, weighted average years of schooling, share of laborers with special skills, working age laborer share of household, share of male laborers and province*year and household fixed effects.

Appendix Table 5
Relationship between Cadre Status and Communist Party Membership
in Rural China

Type	Obs.	Percentage
Cadre only	1,546	8.03
Cadre + Membership	4,216	21.89
Membership only	13,496	70.08
Total	19,258	100

Note: The numbers of observations here refer to the numbers of household-year observations.

Income Per Capita Regression by Source with Interactions between Cadre Status and Other Household Characteristics Included

Variable	Total Income	Total Wage Income	Local Employment
Cadre	-123.8	-78.22	-120.9**
	(90.91)	(58.24)	(47.97)
Communist Party Membership	78.35***	68.12***	48.44***
	(13.33)	(11.04)	(7.515)
Cadre X Communist Party Membership	-5.953	33.64	53.66***
	(34.65)	(26.34)	(18.04)
Weighted average years of education	14.68***	12.52***	5.884***
	(1.360)	(1.052)	(0.781)
Cadre X Weighted average years of education	-0.575	-2.315	4.341
	(5.988)	(4.860)	(3.949)
Share of laborers with special skills	115.7***	32.07*	11.83
	(20.80)	(17.44)	(12.58)
Cadre X Share of laborers with special skills	9.417	133.8*	102.6
	(111.0)	(80.15)	(72.20)
Share of laborers	490.6***	298.9***	63.27***
	(18.64)	(13.83)	(8.632)
Cadre X Share of laborers	316.1***	181.5***	179.7***
	(96.67)	(70.09)	(60.15)
Share of male laborers	82.71***	22.72**	18.18***
	(15.27)	(11.18)	(6.885)
Cadre X Share of male laborers	41.30	32.96	78.55**
	(78.80)	(53.42)	(35.90)
Cons.	166.1***	-115.2***	17.92**
	(18.18)	(13.91)	(8.513)
Adjusted R-Squared	0.611	0.554	0.503
Observation	123,867	123,867	123,867

Note: Robust standard errors in parentheses. ***, ** and * refer to 1%, 5% and 10% statistical significance level, respectively. Control variables include household Communist Party membership, weighted average years of schooling, share of laborers with special skills, productive assets per capita, arable land per capita, working age laborer share of household, share of male laborers and province*year and household fixed effects.

Appendix Table 7
Simple OLS Regression for Village Subsidies, Aids and Fund and Transfer from Government

Variable	Village Subsidies, Aids and Fund	Transfer from Government
Cadre	54.33***	8.117***
	(2.745)	(1.420)
Communist Party Membership	9.752***	3.261***
	(0.954)	(0.557)
Cons.	5.559***	3.601***
	(0.213)	(0.142)
Adjusted R-Squared	0.116	0.021
Observations	53,522	53,522

Note: Robust standard errors in parentheses. ***, ** and * refer to 1%, 5% and 10% statistical significance level, respectively.