

Gendered Pathways to Rural Schooling: The Interplay of Wealth and Local Institutions*

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ABSTRACT Using a 2004 survey of over 1,000 children in a multi-ethnic county of Yunnan province, this article demonstrates how household and village assets operate in gender distinct ways to promote school enrolment in an era of economic privatization and skewed sex ratios. As expected, parental and village wealth facilitate enrolment, but parental wealth is far more decisive for girls than boys. Similarly we find a gender difference in the impact of such parental cultural capitals as education and membership in the Communist Youth League. For a daughter, having a father with higher than average levels of education and past membership in the Youth League facilitates enrolment independent of household wealth; for sons the impact of father's cultural capital is positive but less decisive. Having a more educated mother or a mother who was in the Youth League also promotes a child's enrolment but not as significantly as father's assets. In conclusion, the article considers why parents' involvement in the Youth League during their own adolescence but not their current Communist Party membership facilitates school enrolment, and the broader social and political implications for the role of the Communist Party in rural society.

On the eve of the post-Mao economic reforms, only 20 per cent of the national workforce had completed nine years of secondary education.¹ Six years later, in May 1985, the National People's Congress passed the Compulsory Education Law (*yiwu jiaoyufa* 义务教育法) that mandated that every child complete junior high school, but side-stepped the hard question about financing such a mandate. For decades China had relied on multi-level financing (*duo cengci, duo qudao* 多层次多渠道) that had created large disparities in per child spending across communities and between rural and urban households. Not only did the new mandate fail to remedy these pre-existing disparities but the collapse of the commune and subsequent fiscal decentralization further exacerbated the

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1 Central Committee and the State Council "Decisions on strengthening employee training," Central Committee Document No. 8, 20 February 1981, State Council, Beijing, China.

inequities.² Under the new administrative architecture and fiscal procedures, villages assumed responsibility for primary school financing, townships (*xiang* 乡) for junior secondary, and counties for upper middle schools and vocational education. By contrast, in urban areas, city districts took financial responsibility for all levels of schooling, fees were quite standardized, and parents paid a lower percentage of total costs than in rural areas. Over the next decade, this fragmented system interacted with macro-level economic disparities to intensify financial burdens on families in the least prosperous regions and in families with the lowest incomes.

In unveiling the Education Plan for the 21st century in June 1999, leaders promised to increase government spending on education, and by 2002 the total percentage of GDP devoted to education had indeed surpassed 5 per cent for the first time in more than a decade³ (see Table 1). However, in terms of government budgets, spending on education actually declined as a percentage of all public expenditure and reliance on direct charges to parents increased.⁴ In 1991 the government had paid 84.5 per cent of all educational expenditure; in 2003 it paid only 62 per cent.⁵ In 1991 tuition and fees represented 4.4 per cent; by 2003 they had risen to 18.1 per cent (see Table 1).

Within rural areas this increased reliance on non-government funds as well as the general trend of fiscal decentralization produced considerable disparities in the modes and the levels of financing for education across rural areas.⁶ On average total government expenditure by counties (excluding urban districts) in 2001 exceeded the “within budget” (*yusuan nei* 预算内) allocation by a factor of 1.62 to 1. That is, for each *yuan* assigned through the formal budget, an additional 62 *fen* came from other sources. In a province like Jiangsu where local governments could easily draw informally on the financial resources of enterprises and service units (*shiye danwei* 事业单位),⁷ the extra-budgetary shares of expenditure dwarfed within-budget allocations by almost five to one and educational spending was the highest in the country (see Table 2).

2 Central Committee, “Zhonggong zhongyang guanyu jiaoyutizhi gaige de jue ding” (“Central Committee decision on reform of the education system”) reprinted in *Zhonghua renmin gongheguo jiaoyu falu fangui zonglan* (*Compilation of Education Laws and Regulations of the PRC*) (Beijing: Falü chubanshe, 2000), pp. 2–7.

3 Mun C. Tsang, “Intergovernmental grants and financing of compulsory education in China,” paper first presented in June 2001 posted at www.teacherscollege.edu/center/coce.

4 *Zhongguo caizheng tongji nianjian 2003* (*Chinese Financial Statistics Yearbook 2003*), accessed from www.china.infobank.com: “Zhongguo linian zhongyang he difang caizheng zhichu ji bishong tongji (1953–2002).”

5 These shares add budgetary and extra-budgetary spending as a share of total educational expenditures, as presented in Table 1.

6 Emily Hannum, Jere Behrman and Meiyang Wang, “Human capital in China,” presented at Pittsburgh PA, 3 November 2004, available at <http://www.economics.utoronto.ca/brandt>. Jocelyn Wong Lain-gok, “School autonomy in China: a comparison between government and private schools within the context of decentralization,” *International Studies in Educational Administration*, Vol. 32, No. 3 (2004), pp. 58–74.

7 On the impact of the post-1994 tax assignment of government/firms ties, see Zhu Hengpeng, “Regional decentralization, fiscal incentives and privatization of public-owned enterprises,” *China & World Economy*, Vol. 12, No. 6 (2004), pp. 24–37.

Table 1: Educational Expenditure on Education, by origin (1991–2003)

	Total educational expenditure (millions of yuan)	Education expenditure as % of GDP	Government funds			Non-government funds			
			Within budget funds	Extra-budgetary funds	Funds of social organizations and citizen-run schools	Donations and fundraising	Tuition and miscellaneous fees	Other	
1991	73,150	3.38	62.8%	21.6%	0.0%	8.6%	4.4%	2.5%	
1992	86,705	3.25	62.1%	21.9%	0.0%	8.0%	5.1%	2.9%	
1993	105,994	3.07	60.8%	21.1%	0.3%	6.6%	8.2%	3.0%	
1994	148,878	3.19	59.4%	19.5%	0.7%	6.5%	9.9%	4.0%	
1995	187,795	3.27	54.8%	20.4%	1.1%	8.7%	10.7%	4.4%	
1996	226,234	3.38	53.6%	20.3%	1.2%	8.3%	11.5%	5.1%	
1997	253,173	3.46	53.6%	19.9%	1.2%	6.7%	12.9%	5.6%	
1998	294,906	3.83	53.1%	15.8%	1.6%	4.8%	12.5%	12.1%	
1999	334,904	4.16	54.2%	14.1%	1.9%	3.8%	13.8%	12.2%	
2000	384,908	4.36	54.2%	12.4%	2.2%	3.0%	15.5%	12.8%	
2001	463,766	4.84	55.7%	10.2%	2.8%	2.4%	16.1%	12.8%	
2002	548,003	5.29	56.8%	6.9%	3.1%	2.3%	16.8%	14.0%	
2003	620,827	5.31	55.6%	6.4%	4.2%	1.7%	18.1%	14.1%	
Yunnan (2003)	14,484	5.54	74.7%	1.7%	2.5%	0.9%	9.4%	7.5%	

Sources:

ZGTJNJ 2004. Downloaded from www.chinainfobank.com, item *Zhongguo 2002 nian gediqu jiaoyu jingfei jingkuang tongji* (China Educational Funding Statistics Yearbook 2002). Educational expenditure data is based on ZGTJNJ 2003, p. 747. 2002 Education values were downloaded from www.chinainfobank.com (ZGTJNJ2004, item *China Educational Funding Statistics Yearbook 2002*). GDP data is based on ZGTJNJ 2003, p. 55. 2003 data is based on ZGTJNJ 2005, p. 712. 2003 GDP data is based on ZGTJNJ 2005, pp. 51 and 59.

Table 2: Importance of Extra-budgetary Finance in Education in Rural China (2001)

Province	Ratio of extra-budgetary to budgetary education expenditures	Total government education spending per capita
Jiangsu	4.93	720.69
Beijing	1.39	695.17
Shanghai	1.27	496.43
Xinjiang	1.38	370.41
Zhejiang	1.95	356.96
Tianjin	1.44	325.00
Tibet	1.03	305.30
Guangdong	1.89	281.88
Fujian	1.56	251.68
Neimenggu	1.52	230.57
Qinghai	1.16	229.34
Ningxia	1.22	226.81
Jilin	1.71	216.66
Yunnan	1.21	201.14
Shandong	1.77	197.34
Sichuan	1.60	195.22
Shanxi	1.42	190.14
Hubei	2.03	185.68
Gansu	1.27	184.37
Heilongjiang	1.24	180.78
Shaanxi	1.39	177.32
Hunan	1.97	171.70
Guangxi	1.39	171.24
Hebei	1.46	166.16
Liaoning	1.67	163.99
Hainan	1.55	161.37
Jiangxi	1.56	159.53
Anhui	1.49	159.52
Chongqing	1.70	138.40
Henan	1.64	131.93
Guizhou	1.26	124.71

Source:

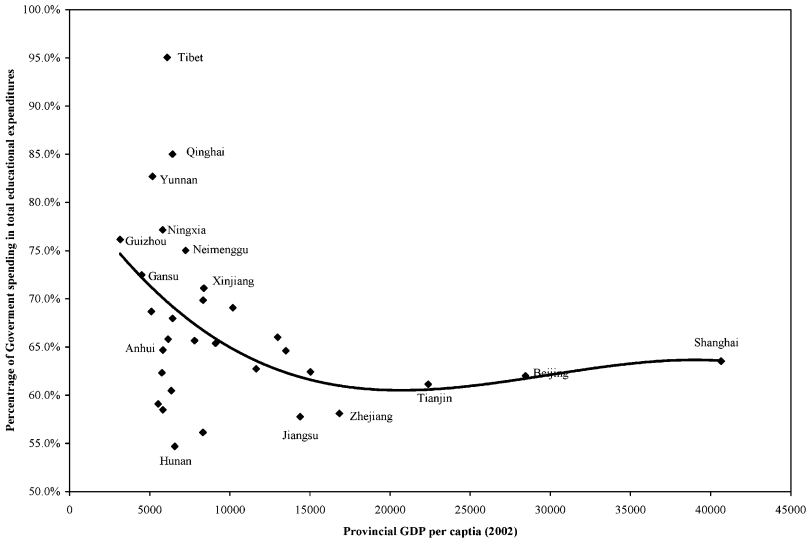
Computed from Appendix 1, Chinese Education Finance Yearbook, 2002, pp. 388–497. Computed as the ratio of total per capita education expenditures in 2001 over per capita education within budget expenditures. Numbers represent provincial averages from county-level data, including county-level cities, but excluding urban districts.

Counties in the poorest provinces, however, are not necessarily the worst off because these areas often receive fiscal transfers that reduce the need for extra-budgetary funds.⁸ In this way, Tibet covers education expenditure almost entirely within its formal budget.⁹ Rather, the worst off are the Han-dominated provinces that do not enjoy significant levels of redistribution and whose local

8 For a discussion of transfers post-1994, see Jun Ma and John Norregaard, “China’s fiscal decentralization” (1998) accessed from www.imf.org/external/pubs/ft/seminar/2000/idn/china.pdf.

9 Tibet’s total transfers amount to 45% of the region’s GDP, against a national average of 4%. See Ehtisham Ahmad, Li Keping and Thomas Richardson, “Recentralization in China?” paper presented at the IMF conference of decentralization (2000) available at <http://www.imf.org/external/pubs/ft/seminar/2000/fiscal/ahmad.pdf>.

Figure 1: Relationship between Government Funding for Education and Provincial GDP per capita



Source:

Adapted from ZGTJNJ 2004, item *Zhongguo 2002 nian gediqu jiaoyu jingfei jingkuang tongji* (China Educational Funding Statistics Yearbook 2002). GDP data draws from ZGCaizhengNJ2003, item *Zhongguo linian ge diqu renjun guonei shengchan zongzhi tongji* (Statistics on China's GDP), 1995–2002. Both sets of data were downloaded from the statistical archive at www.chinainfobank.com.

governments have few sources of financing. Examples include Liaoning, which is beset with the crisis of the state sector, and the central provinces of Anhui and Henan where local enterprises are not well developed and foreign investment is much lower than in coastal areas.¹⁰ Broadly speaking, the autonomous regions and provinces with a high proportion of ethnic minorities tend to be less reliant on direct fees. In contrast, many equally poor provinces are forced to shift a much larger proportion of the education burden to end users (see Figure 1). Yunnan province – and by extension the county where we conducted our survey – falls near the middle in terms of total government per capita spending on education, but relies far less on non-government spending than the national mean (see Table 2).

In rural communities, the greater reliance on direct charges is particularly onerous because public subsidies are lower than in cities and household cash incomes one-fifth to one-sixth of those of city families.¹¹ In addition, because

10 Su Ming and Zhao Quanzhou, “China’s fiscal decentralization reform,” paper presented at the international symposium “Fiscal decentralization in Asia revisited,” Hitotsubashi University, February 2004, <http://www.econ.hit-u.ac.jp/~kokyo/APPPsympo04/China.pdf>.

11 The size and ratio of the urban/rural differential varied significantly across provinces and across time, but over the 1990s urban children generally received twice as much public spending and increased over the decade. Zhang Yulin, “Zhongguo jiaoyu bupingdeng qingkuang lanpishu” (“Bluebook on educational inequality in China.” *Zongguo gaige*, November 2004; Eric Harwit, “Spreading telecommunications to developing areas of China,” *The China Quarterly*, No. 180 (2004), p. 1025.

new school construction in rural areas has favoured larger junior high schools that draw students from broader geographic catchments than the previous smaller facilities, children living in less densely settled communities are often required to board for five or six nights each week. Thus while the new investment in rural education has provided improved facilities with better trained teachers, completion of the now mandatory junior high education requires most rural parents to pay additional fees for meals, transport and dormitories.¹² In an earlier era, such costs might have been at least partially collectivized, but in an era of fiscal decentralization and commodification of social services, families are encouraged to view educational spending as part of a long-range, personal investment strategy and village leaders lack the fiscal tools to subsidize the higher direct costs to parents.

National Trends in Primary and Secondary School Enrolments

Given relatively stagnant rural incomes since 1998, one might predict that rising school costs charged directly to parents would depress enrolments, and that if rural parents had to choose between keeping a son or daughter in school, they would first fund the boy.¹³ The increasingly distorted sex ratios within the Chinese population suggest a strong preference for male offspring, and historically rural female enrolment lagged behind that of males.¹⁴ Studies of rural enrolment that relied on surveys from the early 1990s documented this expected male advantage.¹⁵ More recently, Brown and Park – using a 1997 survey of poor counties in six provinces – found that rural boys entered primary school at a younger age than girls and were less likely to drop out when they had poor grades.¹⁶

Other materials, however, document no decline in enrolment rates for either boys or girls and present a mixed picture of some gains and no major loss in the share of females at each level of education.¹⁷ In 2003, the government reported that the percentage of children between the ages of eight and sixteen enrolled in school was higher than in 1990 and that the gender gap had narrowed at highest

12 Rachel Murphy, “Turning peasants into modern Chinese citizens,” *The China Quarterly*, No. 177 (2004), pp. 10–11.

13 *Zhongguo tongji nianjian 2002 (Chinese Statistical Yearbook 2002)* (Beijing: Zhongguo tongji chubanshe, 2002), Table 10.3.

14 Estimates in national censuses report male/female sex ratios among those 0–4 years of age of 106.5 in 1964, 107.0 in 1982, 109.8 in 1990, 118.8 in 1995 and 120.8 in 2000. Yong Cai and William Lavelly, “China’s missing girls,” *China Review*, Vol. 3, No. 2 (2003), p. 15.

15 Rachel Connelly and Zhenzhen Zheng, “Determinants of school enrollment and completion of 10 to 18 year olds,” *Economics of Education Review*, No. 22 (2003), pp. 379–88; Emily Hannum “Educational stratification by ethnicity in China,” *Demography*, Vol. 39, No. 1 (2002), pp. 95–117.

16 Phil Brown and Albert Park, “Education and poverty in rural China,” *Economics of Education Review*, No. 21 (2001), pp. 523–41.

17 The decline in numbers of children in primary school after 1998 reflects the decline in numbers of births, not decreased enrolment of primary school age children. Xiaoyan Liang “China: challenges of secondary education,” World Bank Report No. 22856 (August 2001) available at <http://econ.worldbank.org/topic.php?topic=10>.

Table 3: **Official Enrolments at All Levels 1980 to 2004 (millions of students)**

	Graduate	Tertiary	Senior high	Zhong zhuan	Vocational	Junior high	Primary
1980	0.021	1.14	9.70	1.24	0.45	45.38	146.27
1990	0.093	2.06	7.17	2.24	2.95	38.69	122.41
1991	0.088	2.04	7.23	2.28	3.16	39.61	121.64
1992	0.094	2.18	7.05	2.41	3.43	40.66	122.01
1993	0.106	2.54	6.57	2.82	3.63	40.82	124.21
1994	0.127	2.80	6.65	3.20	4.06	43.17	128.23
1995	0.145	2.91	7.13	3.72	4.48	46.58	131.95
1996	0.163	3.02	7.69	4.23	4.73	49.70	136.15
1997	0.176	3.17	8.50	4.65	5.12	51.68	139.95
1998	0.198	3.41	9.38	4.98	5.42	53.63	139.54
1999	0.233	4.13	10.50	5.16	5.34	57.22	135.48
2000	0.301	5.56	12.01	4.90	5.03	61.68	130.13
2001	0.393	7.19	14.05	4.58	4.66	64.31	125.43
2002	0.500	9.03	16.84	4.56	5.12	66.04	121.57
2003	0.651	11.08	19.65	–	5.28	66.18	116.90
2004	0.819	13.34	22.20	–	5.69	64.75	112.46

Source:

ZGTJNJ 2003 table 20–5 p.719 and table 20–8 p.721; ZGTJNJ 2005, table 21–6 p.691, table 21–9, p. 694

Table 4: **Girls as Percentage of Primary, Secondary and Tertiary Students 1980–2004**

	1985	1990	1995	2000	2002	2004
Tertiary	30.0	33.7	35.4	41.0	44.0	44.2
Specialized secondary	38.6	45.4	50.3	56.6	56.6	55.0
Regular secondary	40.2	41.9	44.8	46.2	46.7	45.8
Vocational secondary	41.6	45.3	48.7	47.2	47.6	48.2
Primary	44.8	46.2	47.3	47.6	47.2	47.0

Source:

National Bureau of Statistics of China *China Statistical Yearbook* (2003) Section: Education, Science and Culture (Table 20–20), p. 726 at <http://www.stats.gov.cn/tjsj/ndsj/>. *China Statistical Yearbook* (2005), Science and Culture (Table 21.–2), p. 690.

levels of education¹⁸ (see Tables 3 and 4). Surveys in several locations in rural China between 1995 and 2000 also indicated that higher costs had neither noticeably decreased enrolment rates nor increased the gender gap.¹⁹

In this article we evaluate how these recent changes in school location and education financing have affected enrolment patterns. Given the newest findings of a shrinking gender gap in the context of rising direct costs to parents over the

18 Using the 1989 Health and Nutrition Survey and the 2000 census, Emily Hannum and her colleagues found that between 1989 and 2000 gender disappears as a significant predictor of enrolment. Hannum, Behrman and Wang, “Human capital.”

19 Laurel Bossen, *Chinese Women and Rural Development: 60 Years of Change in Lu Village, Yunnan* (Lanham: Rowman and Littlefield, 2002), pp. 337–38; Emily Hannum, “Poverty and basic education in rural China: community and household influence on girls’ and boys’ enrolment,” *Comparative Education Review*, Vol. 47, No. 2 (2003), pp. 141–59; Li Danke and Mun C. Tasang, “Household decisions and gender inequality in education in rural China,” *China: An International Journal*, Vol. 1, No. 2 (2003), pp. 224–48.

decade of the 1990s our project was particularly concerned with assessing the interaction between a child's gender and parental and community assets. Drawing on previous work on rural education in both China and other developing countries,²⁰ we hypothesized that family poverty would depress female enrolment more than male and that economic assets would be the most decisive. Given the collapse of village-level collective services and the more general de-politicization of village life, we also expected to find no independent impact of parental membership in the Communist Party. However, while village families could no longer draw directly on collective assets as they could in the collective era of teams and brigades, we hypothesized that village children may still be able to use more intangible assets beyond their own immediate family such as the quality of village leadership or social networks that could inform or motivate parents to follow community norms.

We now turn to an analysis of our survey results to test these hypotheses. We begin with a description of our research design and sample and then discuss our measurements for tangible and intangible assets held by the parents and the village. After demonstrating the ways in which characteristics of child and parent interact to produce a gendered pathway to enrolment, we conclude with a more speculative discussion about the roles of past membership in the Youth League and current Party membership.

Gaoyuan Survey

During the summer of 2004, the four authors conducted a household survey in 60 natural villages (*ziran cun* 自然村) in one Yunnan county, here identified by the pseudonym of Gaoyuan, that systematically gathered materials on financial, social and political assets at household and village levels.²¹ Gaoyuan county is located in the Red River Hani-Yizu autonomous district of Yunnan province where 90 per cent of adults work in agriculture. In 2003 it had a population of nearly a half a million residents of whom 40 per cent were non-Han, primarily Hani and Yi, with significant numbers of Hui (回), Miao (苗), Sani (撒尼) and Zhuang (壮). In Gaoyuan, ethnic minorities are not restricted to specific townships, but they are more likely than Han to live at higher elevations and to be under-represented in the three most urbanized, lowland areas. Gaoyuan ranks as a middle-income county in Yunnan but contains four townships of extreme hardship. In the year prior to our survey, 11,262 children graduated from its 177 primary schools, 7,501 from the 17 junior high schools and 801 from the five senior high schools.²²

20 Connelly and Zheng, "Determinants," pp. 379–88; Hannum, "Educational stratification," pp. 95–117; Brown and Park, "Education and poverty," pp. 523–54; M. Binder, "Family background, gender, and schooling in Mexico," *Journal of Development Studies*, Vol. 35, No. 2 (1998), pp. 54–71; A. Deolalikar, "Gender differences in the returns to school and in school enrollment rates in Indonesia," *Journal of Human Resources*, Vol. 28, No. 4 (1993), pp. 899–932.

21 We use the fictional name of "Gaoyuan" as agreed by our institutional sponsor in China.

22 *Gaoyuan Statistical Yearbook 2004*, pp. 99, 101 and 103.

Table 5: **Comparison of Gaoyuan County with Yunnan and the Rest of China (1999)**

	Gaoyuan	Deviation from	
		Yunnan mean	China mean
Total population	480,000	-0.58	0.05
Rural population	424,000	-0.36	0.11
Rural labour force	257,000	0.22	0.34
(incl. engaged in agriculture)	226,000	0.86	0.72
Total GDP at current prices (10,000 yuan)	292,923	-0.26	0.14
Total value of primary sector (10,000 yuan)	40,791	-0.92	-0.47
Total value of secondary sector (10,000 yuan)	216,811	0.61	0.66
GDP per capita (yuan)	6,103	0.40	0.29
Local financial revenue (10,000 yuan)	11,480	-0.24	0.25
Local financial revenue per capita (yuan)	240	0.48	0.22
Financial expenditure (10,000 yuan)	17,202	-0.20	0.21
Number of students enrolled in school	82,226	-0.61	0.01
Number of students in school per 10,000 people	1,713	-0.34	-0.05
Number of doctors per 10,000 people	23.6	0.93	0.26
Student/teacher ratio	22.2	0.25	0.34

Notes:

Deviation is defined as $(x_{\text{gaoyuan}} - \bar{x}_{\text{ref}}) / (\text{standard deviation } (x_{\text{ref}}))$ where \bar{x}_{ref} is the mean value of variable x , either in Yunnan or in the entire dataset. Data includes all counties and county-level cities, but not urban districts

Source:

Data computed from *Zhongguo xian (shi) shehui jingji tongji gaiyao 2000 (Abstract of Chinese County Social and Economic Statistics 2000)* (Beijing: Zhongguo tongji chubanshe, 2001).

In the national context, Gaoyuan is typical of non-coastal agricultural counties. All of its major socio-economic indicators lie within one standard deviation of either the provincial or the national mean. The county is slightly richer than average for Yunnan, and therefore approaches the national averages for per capita GDP and fiscal revenue. Thus, while we do not claim that our sample is representative of China or Yunnan in a strict statistical sense, we believe that patterns in Gaoyuan speak directly to the general situation of inland rural counties (see Table 5).

Sample selection

Although Gaoyuan county was purposefully selected, the respondents constitute an equal probability sample of all households in the county. To guarantee that we captured both economic and ethnic diversity of the county, we first stratified the 15 townships into two groups: those whose Han population exceeded 50 per cent of the total based on the 2000 census, and those where the majority of the population belongs to an ethnic minority. We then randomly selected three townships from the first group and two townships from the second. Within each township, we selected a number of administrative villages proportional to

the number of households in the township.²³ In total, we drew 30 administrative villages (*xingzheng cun* 行政村). Finally, within each administrative village, we randomly selected two natural villages.²⁴ Among these 60 natural villages there is significant variation of wealth, employment and ethnicity to allow study of the relative contribution and interaction of multiple parameters of household and village resources (see Table 6).

The final respondents were selected randomly from the name list of all household heads in the natural village.²⁵ Three days prior to the scheduled interview, we met the leaders of each natural village to identify all households on the list that had a child born between 1985 and 1996. Names of these household heads were then sorted randomly in order to produce a list of 12 households to be interviewed. The remainder (from the 13th household onward) was used to perform substitutions if respondents from the main list could not be reached on the day of the interviews. Within each household, the father or the mother was randomly selected. However, if the selected mother (father) was not present at the time of the interview but her (his) spouse was, he (she) was interviewed instead.

In each administrative village, we interviewed the Party secretary or the village committee chairman (*cunweihui zhuren* 村委会主任) about the general conditions of the village economy and educational facilities. We also administered the cadre questionnaire to the leader of each natural village (*cun xiaozu zuzhang* 村小组组长).

Although not all villages had 30 households with a child born within the targeted years, we completed no fewer than 11 home visits in all 60 *ziran cun*, and successfully interviewed equal numbers of mothers and fathers in 700 households as well as 90 village cadres. From the parent interviews, we gathered complete education histories of 1,072 children born between 1985 and 1997. Some 40 per cent of the children had one or more non-Han parents and 86 per cent of fathers and 95 per cent of mothers reported their primary occupation as farming. Having sampled 0.50 per cent of the 119,677 households in the county, we believe our sample is representative of all households in the county with children between the ages of eight and nineteen.

Sex ratios among the children

Between the 1982 and 2000 censuses, the ratio of men to women in the population of Yunnan increased noticeably. In 1982, men slightly outnumbered

23 Because of rounding, our sample slightly overdraws the minority stratum. Probability weights were adjusted to account for this small discrepancy in our statistical analyses.

24 At each stage (township, administrative village and natural village) the sampled units were selected with probabilities proportional measures of size (PPS), which ensures that any household in the sample has the same probability of being selected as any other household. Since the number of sampled villages varies by townships, the sample is naturally self-weighting at the administrative village level. By selecting two natural villages in each administrative village, we were able to limit clustering to groups of about 12 households per *ziran cun*.

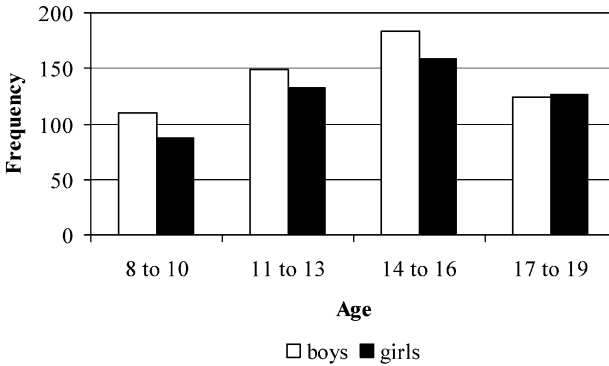
25 In each natural village, we randomly selected 30 households. This number was determined based on our expectation of completing an average of 12 interviews per village, taking into account the proportion of households that would not have children within our age range as well as the possibility of non-contact or refusal on the day of household interviews.

Table 6: Overview of Socio-economic Conditions in the 15 Townships of Gaoyuan

Township ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	*		*		*		*			*				*	
Number of natural villages	59	81	88	89	84	96	72	45	158	47	57	58	65	32	n.a.
Population (2000 census)	78,426	54,275	55,998	48,142	42,564	30,065	41,729	25,560	37,379	22,712	13,284	17,246	18,012	10,250	n.a.
Agricultural population	45,149	45,186	49,513	40,624	40,744	27,289	36,562	24,924	36,772	21,421	12,607	16,536	18,033	9,940	3,496
% ethnic minority (2000 Census)	12.64	23.80	38.19	32.14	4.85	53.30	6.63	93.77	46.08	80.09	75.57	93.93	68.23	56.02	n.a.
Natural growth rate of population (%)	9.2	9.5	9.0	10.2	6.3	7.5	7.5	3.5	7	5.1	8.3	7.8	6.2	8.9	n.a.
Population density (people/km ²)	760	140	138	134	342	90	324	57	96	77	33	46	50	55	n.a.
Industrial output per capita (yuan)	128	1,217	2,075	314	714	206	2875	18	45	256	9	19	31	64	n.a.
Agricultural output per capita (yuan)	588	1,284	1,060	1,458	868	826	719	851	938	1,042	1,338	1,258	940	1,033	n.a.
Farmers' disposable income per capita (yuan)	1,857	1,451	1,677	1,532	1,142	1,117	1,785	898	966	1,251	817	1,051	820	1,053	n.a.

Note: Stars below the township ID number denote that the township was selected in the survey. The data were compiled before townships 1 and 7 were merged in 2003. Our sample frame reflected this merger. Source: Gaoyuan Xianqing 1993–1997, Yunnan Ethnic Press, 1999. "Gaoyuan" is a pseudonym.

Figure 2: Distribution of Gender and by Birth Cohort



women, but as a result of an increasingly distorted sex ratio among those born after the one-child campaign, the ratio increased to 105.67 men to 100 women in 1990, and further rose to 110 men to 100 women by 2000.²⁶ The sex ratio in our sample of children born between 1985 and 1997 captures this trend²⁷ (see Figure 2).

Overall enrolment rates

In terms of overall enrolment rates, children in Gaoyuan attend school at, or above, average rates for rural China.²⁸ Of the 566 boys and 506 girls in the sample who were between the ages of eight and nineteen, 72 per cent enrolled in spring 2004. While the total number of boys enrolled ($N=407$) slightly exceeded the number of girls ($N=392$), controlling for the number of children in each birth year, girls consistently were more likely to be in school than their male age mates and the female advantage was most pronounced after the age of 13 (see Figure 3). However these initial frequencies alone do not capture how gender and age interact among children from families and villages with different mixtures of assets. To present a more complete evaluation, we now turn to a multivariate analysis that accounts for the heterogeneity of assets among parents, as well as the variation of collective resources across villages.

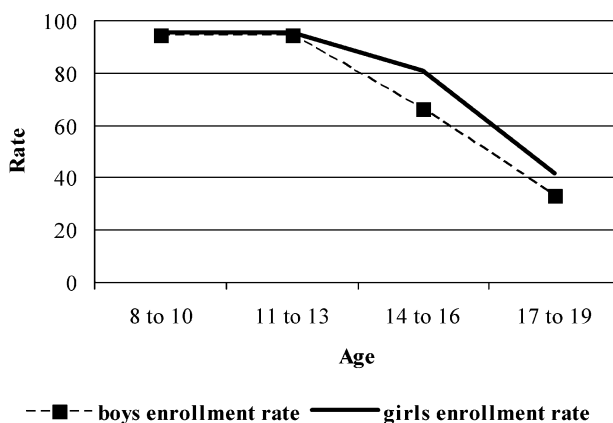
Multivariate analysis

To model the interaction among the characteristics of the child, parents and community that determine a child's enrolment in school, we designed a

26 From UNESCO files available at <http://www.unescap.org/pop/database/chinadata.yunnan.htm>, accessed 3 July 2003.

27 Among those born between 1985 and 1987, there were 124 boys and 127 girls, between 1988 and 1990, 183 boys and 158 girls, between 1991 and 1993, 149 boys and 133 girls, and between 1994 and 1996, 110 boys and 88 girls.

28 Moreover only 1.3% (six girls and eight boys) had never attended school, and among those nine and older, only three girls and three boys had never enrolled

Figure 3: **Enrolment Rates for Boys and Girls by Birth Cohorts**

multivariate analysis that combined the usual demographic attributes of a child's age, gender, and number and gender of siblings with several measures of the financial, cultural and political capital of the parents and the community. To assess the financial resources, we asked about ownership of 22 household items that were widely available in the county seat and market towns.²⁹ Like others who have recently conducted household surveys in rural areas, we rely on ownership of possessions rather than reported income to calibrate financial capital because reports of yearly income are unreliable in rural areas where many work outside the cash economy, where cash incomes fluctuate noticeably from year to year, and where there are multiple incentives to mis-report income.³⁰ By contrast, asking about ownership of ordinary household goods while interviewing parents in their homes surrounded by their possessions presents few problems of recall and minimal incentive to lie. In addition, ownership of consumer goods such as televisions, refrigerators, telephones and cameras directly captures accumulated material wealth as well as possible collateral against which parents can borrow. The household possession index also provides a reliable measure for comparing living standards among households in different villages as well as among different households in the same village. Overall, 11 per cent of children lived in households with four or fewer items, 60 per cent in households with between five and nine items, 23 per cent in households with between ten to fourteen items, 5.4 per cent in households with between fourteen and nineteen items, and 0.5 per cent in households with twenty or more. In the

29 The percentage of households that owned each items was: bed (100%), table (98%), electric rice cooker (70%), colour television (65%), bicycle (56%), sewing machine (53%), DVD (45%), desk (29%), washing machine (27%), telephone (26%), motor cycle (23%), radio (19%), electric fan (18%), VCR (9%), electric water heater (8%), pressure cooker (8%), bookshelf (6%), camera (6%), refrigerator (6%), microwave oven (1%), computer (0.3%) and air conditioner (0%).

30 Jennifer Adams and Emily Hannum, "Children's social welfare in China, 1989–1997," *The China Quarterly*, No. 181 (2005), pp. 100–22

multivariate analysis we use an index which is simply the count of possessions in the households divided by the sample mean.³¹ This index has therefore a mean of one, and ranges from .14 to 3.01.

We gathered information on parental human and cultural capital by asking each parent to tell us their birth year, the ethnicity of their parents and themselves, their language abilities, their years of formal education, and their occupational experiences. Each parent also answered the same questions about their spouse and thus we have the complete basic biography of all mothers and fathers. Because of the past role of the Communist Party in implementing national educational policies and mobilizing local resources for both production and social welfare, we also asked about parents' membership in the Communist Youth League and the Communist Party. Our expectation was that children whose parents were Party members would have advantages independent of their family wealth or parents' education, and children whose parents had been in the Youth League might also have different attitudes towards investing in education because of their greater exposure to social and cultural opportunities outside the village. In rural Yunnan before the elimination of the communes in 1983, local village leaders recruited the most promising adolescents into the League as a means of creating a group of young activists who would take leadership among village teens and young adults. Whereas in urban areas League membership was determined in the context of school and particularly rewarded high grades, in rural areas where most adolescents entered the workforce upon completion of primary school, recruitment to the League was more community based. In our sample, where most mothers and fathers were teenagers during the commune era, League membership captures past cultural enrichment and political socialization which we hypothesize carries over into positive attitudes towards investment in education.³² Among our parents 24.4 per cent of fathers and 21.2 per cent of mothers had been League members; only 6.3 per cent of fathers and 0.7 per cent of mothers had joined the Party.

At the level of the local community, we first consider the location of the community in terms of its administrative rank. Villages that were beyond walking distance of a market town were considered rural and coded as rank 3, those that were peri-urban were coded as 2, and a neighbourhood located in the town centre was coded as 1. Because of the well-documented urban advantage as well as the recent concentration of new junior high schools in township or administrative centres, we control for the administrative level to assess the impact of distance and bureaucratic rank. Of the children in our sample 81 per cent live in villages beyond walking distance of a market town, 10 per cent live in peri-urban villages, and 9 per cent in small towns.

31 The possession count excludes the items for which we yield no variation, either because they were present in all households (bed) or absent everywhere (air conditioner).

32 Average age of fathers was 39.5 years with a standard deviation of 6.6. Mothers are 37.4 years old on average, with a standard deviation of 6.1.

To capture the wealth of the village or neighbourhood, we first asked village cadres for average per capita village income in 2003. However because village cadres use these numbers when the township assesses the fiscal burden and/or the performance of the village we found them biased towards the mean and failed to distinguish degrees of wealth as well as the indicators of village economic vitality or quality of infrastructure. Thus in our multivariate analysis we use a simple dichotomized variable indicating the absence or presence of at least one store or enterprise. While such a measure is crude, the presence of a store or firm is a tangible marker of economic vitality and sharply distinguishes between villages where the economy is developing from villages where it is not. It also is not easily manipulated for political purposes.³³ In our sample only four villages were so poor that they had neither store nor enterprise.

In addition to the economic resources and administrative rank, we also factor in social and political capital at the community level that parallel those at the household level and which we hypothesize represent collective assets that would mitigate the impact of household poverty. To capture social networks at the community level we took an inventory of public facilities or organizations.³⁴ Among the 60 natural villages, 87 per cent had a meeting hall, 77 per cent had a temple, 67 per cent had had a performance group and 5 per cent had a lineage hall. To capture the political resources, we calculated the percentage of Communist Party members in the total population. There were no villages without any Party members, but the percentage varied between a low of 0.3 per cent to a high of 4.3 per cent.

Results and discussion

We estimate a logit model where a dichotomous dependent variable (*was the child in school last semester or not?*) is regressed against our explanatory variables at the level of child, parent and village.³⁵ The model accounts for the slight over-representation of ethnic minorities³⁶ as well as minor variations in the final number of completed interviews in each village.³⁷ In addition to probability weights, all standard errors are adjusted to take into account the clustering of

33 Previous regression analyses (available from the authors) of our village dataset show that average incomes as reported by village cadres were predicted by the presence or absence of stores or firms. However, in the final model we use the dichotomized variable on the presence or absence of a store or firm because we suspect that village income measures are biased.

34 The four facilities or organizations about which we inquired were: temple to any deity, lineage hall (*citang*), song and dance troupe, and public meeting hall.

35 Specifically, we estimate the probability that child i was enrolled: $\Pr(y_i=1|X)=1/(1+e^{-X\beta})$, where X is matrix of independent variables and y a binary variable. See J. Scott Long, *Regression Models for Categorical and Limited Dependent Variables* (London: Sage Publications, 1997), pp. 34–84.

36 The best allocation called for drawing two townships in minority areas and three in the Han-dominated stratum. However, given our measures of size, we should have drawn 1.7 (not two) minority townships, hence their slight over-representation.

37 The use of probability weights tends to increase standard error estimates. Our results err therefore on the side of caution. We also performed a number of robustness checks by estimating alternative models that explicitly incorporate survey design effects (without fixed effects by administrative village). Our findings remained unchanged.

Table 7: Sample Description of Children and their Communities

	N	Mean	SD
Individual level variables			
Boy	1,072	0.527	0.499
Age	1,072	13.80	3.14
With no boys in household	1,072	0.163	0.369
Possession index normalized	1,072	1.002	0.473
Father education in years	1,061	6.39	3.24
Mother education in years	1,052	4.78	3.33
Father a Youth League member	1,033	0.243	0.429
Mother a Youth League member	1,042	0.202	0.402
Father CCP member	1,049	0.061	0.241
Father Han	1,064	0.725	0.446
Village level variables			
Administrative level (1–3)	60	2.7	0.64
Has at least one firm (0–1)	60	0.916	0.278
Community facilities (0–4)	60	2.3	0.92
Percentage of CCP members in total population	60	1.9%	0.8%

our respondents in 60 natural villages. Finally, we guard against unobserved heterogeneity at the level of the administrative village with a set of fixed effects.

In our model for predicting enrolment in spring 2004, we control for the sex and age of the child, the total number of children in the household, and whether or not there were any boys among siblings regardless of their age. The cultural and political assets of parents are the number of years of education they completed and whether they had ever joined either the Communist Youth League or the Communist Party. We also control for fathers' ethnicity.³⁸ The means and standard deviations of the variables are listed in Table 7.

As the raw enrolment data indicated, late adolescence is the critical time at which Gaoyuan children leave school with boys less likely to enrol than girls (see Figure 3). However, the logit model indicates (see Table 8) that once we place children within their households and the economic and political institutions that shape their community, the apparent female advantage detected in the raw enrolment data disappears and boys have a statistically significant advantage. If we ignore all other coefficients other than the constant term ($\beta = -1.04$), the logit transformation of the coefficient for "boy" ($\beta = 4.99$) indicates that boys are 98 per cent likely to be enrolled,³⁹ against only 26 per cent for girls. Of course, household and community level variables explain why this underlying propensity to favour boys has been overcome in practice.

By interacting each of the parental and community assets – wealth, education, League membership, presence of stores or enterprises, Communist Party density – it becomes clear that there are very distinct gendered pathways to school. First and foremost is the positive and significant impact of wealth at both family and village level, and when we interact household wealth as captured by the

38 Coded 1 for Han and 0 otherwise.

39 Namely $\text{logit}(4.997 - 1.039) = .98$ for boys, and $\text{logit}(-1.039) = .26$ for girls.

Table 8: **Multivariate Logit Model of Enrolment last Semester**

Number of observations		978		
Pseudo R ²		0.41		
Log likelihood		-327.6		
Probability > F		0.000		
		β	Robust Standard Errors	
Child level				
Boy	<i>d.</i>	4.997	1.512	***
Age		0.452	0.524	
Age ²		-0.039	0.018	**
Household level				
Number of children		-0.315	0.302	
No boy in household	<i>d.</i>	-0.037	0.348	
Possession index		1.659	0.418	***
Possession index × boy		-1.522	0.428	***
Father's education		0.222	0.072	***
Father's education × boy		-0.310	0.078	***
Father's education × CYL		-0.289	0.113	***
Father CYL membership	<i>d.</i>	2.048	0.977	**
Father CYL × boy		-2.189	1.237	*
Father's education × CYL × boy		0.365	0.141	***
Mother's education		0.092	0.059	
Mother's education × boy		0.079	0.075	
Mother CYL membership	<i>d.</i>	0.758	0.462	*
Mother CYL × boy		-0.347	0.637	
Father CCP membership	<i>d.</i>	0.446	0.548	
Father is Han	<i>d.</i>	0.302	0.370	
Father is Han × boy	<i>d.</i>	0.371	0.493	
Natural village level				
Administrative centrality		-0.243	0.229	
Village has firms	<i>d.</i>	1.259	0.637	**
Village has firms × boy	<i>d.</i>	-1.205	1.066	
No. of village facilities		0.306	0.191	
No. of village facilities × boy		-0.242	0.315	
CCP members as % of village pop.		0.142	0.151	
CCP as % of village pop. × boy		-0.582	0.270	**
Fixed effect by adm. village		yes		
Constant		-1.039	4.189	

Notes:

d. denotes dummy variables. Standard errors are adjusted for clustering by natural village (Huber-Sandwich procedure)

*** denote probability levels at .001 or better; ** between .001 and .05; and * between .05 and .10.

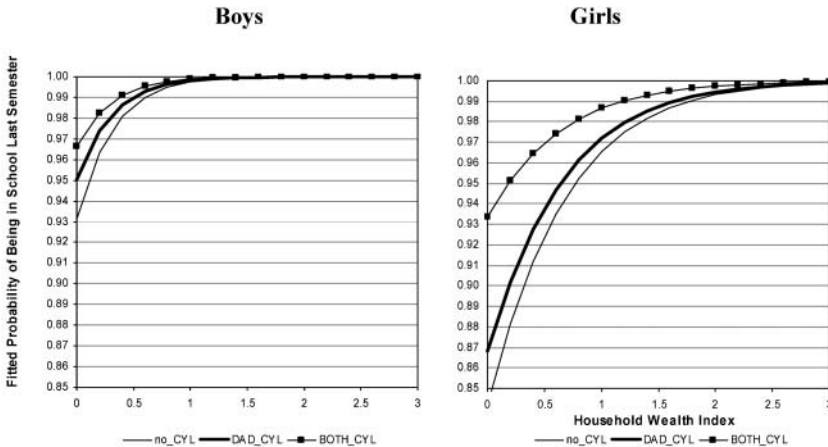
possession index, boys' advantage drops substantially. Thus we find, as did Hannum, that "girls particularly benefited from improved economic circumstances in the household and in the village."⁴⁰ Girls are more affected by household wealth than boys, and the richer the family the more likely a girl will be to enrol.

Cultural and political capital at the household level also significantly boosts enrolment once wealth is controlled. Again the impact varies noticeably by gender. More-educated fathers facilitate the enrolment of daughters, but their level of education alone has no measurable impact on keeping their sons in school.⁴¹ Rather fathers' education benefits boys only in interaction with fathers' membership in the Youth league, which we capture in a three-way interaction term. The picture for mothers is more straightforward. Mothers who have joined the League have significant positive impact on their children's enrolment, regardless of gender, whereas more educated mothers who did not join the League have a positive impact but not at the same level of statistical significance. Party membership of fathers, however, has no impact.⁴²

Figure 4 shows a simulation that illustrates how having parents in the League more dramatically improves the odds of enrolment of girls. For example, if one assumes a level of household wealth approaching zero with neither parent in the League, both girls and boys have relatively lower probabilities of enrolling; however, for girls the effect is much stronger, and only at the highest levels of wealth does the effect of parental League membership disappear.

Figure 5 simulates the interaction of having parents in the League to demonstrate how League membership improves the probability of girls enrolling across different levels of fathers' education, holding all continuous variables at their sample mean. The impact of the League is most noticeable in households

Figure 4: **Estimated Probability of Enrolment by Wealth and Parental CYL Membership**



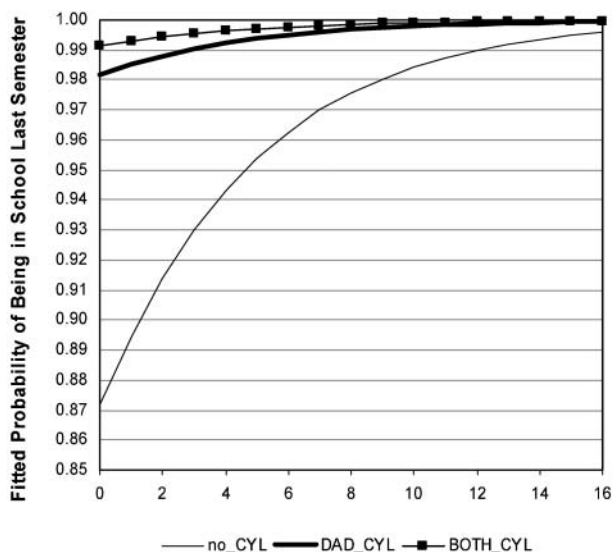
Note:

Fitted odds assume a Han household with two children located in the baseline village (# 502). Continuous variables are held at their sample mean.

41 For girls we need only consider the impact of father's education, which is positive and significant at the .01 level. If we consider boys, the test of joint significance (father's education) + (father's education x boy) show that the net effect is indistinguishable from 0.

42 We do not include mother's Party membership because less than 1% of mothers were Party members.

Figure 5: **Estimated Probability of Girls' Enrolment by Father's Education and Parental CYL Membership**



Note:

Fitted odds assume a Han household with two children located in the baseline village (# 502). Continuous variables are held at their sample mean.

where fathers have the lowest education levels. For example, if one assumes a household where the father has only four years of education and neither parent is a League member, a daughter is 94 per cent likely to be enrolled. If her father happens to be a League member, her probability rises to over 99 per cent, and if both parents are League members, it is a virtual certainty that she would enrol.

Our project also explored the impact of community assets at the level of the natural village or town neighbourhood. In this model, we specifically assess the effect of poverty as indicated by absence of any store or enterprise. As seen in Table 8, the presence of even one store or firm increases enrolment, suggesting that although community-based enterprises no longer make direct financial contributions to funding of education, the fact that a village has enough resources to support even one store or enterprise partially reduces the negative impact of the poverty of individual households. Thus, as in previous studies in China and in other low-income rural societies, assets at the village level can compensate for financial hardship within a child's family.⁴³

Ethnicity, operationalized here as having a Han father, had no significant impact on a child's enrolment and there was no variation by gender. We ascribe

43 Connelly and Zheng, "Determinants of school enrollment and completion of 10 to 18 year olds," pp. 379–88; Hannum, "Poverty and basic education in rural China," pp. 141–59; Derek Chen, "Gender equality and economic development," World Bank working paper No. 3285 available on line at http://econ.worldbank.org/files/35079_wps3285.pdf.

the absence of a clear Han advantage to the controls for wealth and education in the full model and to the fact that the non-Han parents in our sample – 90 per cent of whom were Yi – had comparable levels of education and League membership. Thus, our findings are consistent with Hannum’s analysis of the 1992 UNICEF survey that found non-Han children in wealthier areas equalled or exceeded the enrolment levels of Han children, and that poverty was more decisive than non-Han status.⁴⁴ Overall, our results suggest that the role of ethnicity, particularly in a multi-ethnic county with significant levels of inter-marriage, is too subtle to capture in simple dichotomies between Han and non-Han fathers.⁴⁵

In sum, when one controls for the impact of individual, family and village characteristics, for girls the most critical issue is wealth. For boys, by contrast, most critical is their age, and having a father who is both better educated and a former member of the Youth League. For neither girls nor boys, however, does having a father in the Party provide any advantage. After controlling for all else, there is a less direct and significant impact of mother’s cultural capital as represented by her education. However, as with fathers the impact of League membership is positive and significant, and it is significant for both boys and girls. Given the actual distribution of our dependent variable, these results suggest that several key variables at the household and village level are effectively counter-weighting the underlying social propensity to discriminate against girls and that a model that includes community variables measured at the natural village level has additional explanatory power.⁴⁶

Contradictory impact of League and Party membership

Our results also suggest that membership in the Communist Party and Youth League operate in different ways at household and community level, and that the organizations have different impacts on a rural family’s decision to send sons and daughters to school. Unlike the Communist Party, the League recruits about one-quarter of any age cohort and uses political education and opportunities for socialization beyond the village to create a broad base of support for regime goals among the better educated villagers. We surmise that when the parents of the children in our sample were first introduced to the League, leaders stressed values of gender equality as well as more generally reinforcing the importance of education. It appears that these efforts – deployed

44 Hannum, “Educational stratification by ethnicity in China,” pp. 95–117.

45 Among 683 parent-couples on whom we have full information on ethnicity, in 410 cases both spouses were Han, in 155 or 23% neither parent was Han, and in 118 or 17% one spouse was Han and one non-Han.

46 The likelihood-ratio test shows that the saturated model that includes natural village-level variables has better predictive power than the nested specification with child and household-level variables only. The pure LR-test is significant at the .02 level, but is at the .09 level when forcing the LR estimation with standard errors computed for clustering by village. This confirms the importance of the community in the households’ decision to keep children in school.

during the commune era when our respondents were most likely to have joined the League – have paid off for the current generation of Gaoyuan children.

Membership in the Communist Party by contrast has a different impact. At the household level, having a parent who was a Party member had no independent effect on whether or not a child enrolled. However, when we looked at the impact of Party density in the village as measured by the percentage of the total population who were Party members, we found a significant and gender-skewed outcome. Most notable and somewhat surprising given the powerful positive effect of Youth League membership was the significant negative impact of density of Party membership when we interacted this variable by boy. Initially we hypothesized that political connections that link adult Party members to leaders and organizations in the township and county seat provided information about job opportunities outside the village that pulled boys but not girls out of school. We hypothesized that the best-paying jobs in Gaoyuan were jobs in manual labour not offered to girls. However when we looked at the job experience of those between 15 and 18, we found that not only were a higher percentage of girls (88 per cent) than boys (82 per cent) working, but that girls were also more likely to be working outside agriculture (49 per cent as opposed to 31 per cent) and more likely to be working outside the community, *waidi* (外地) (27 per cent as opposed to 23 per cent). Thus we now conclude that villages with dense Party networks may have better information about policy trade-offs and the true state of the economy, and thus convey information about the returns on education that undermines the more idealistic message of the League about the universal value of staying in school.

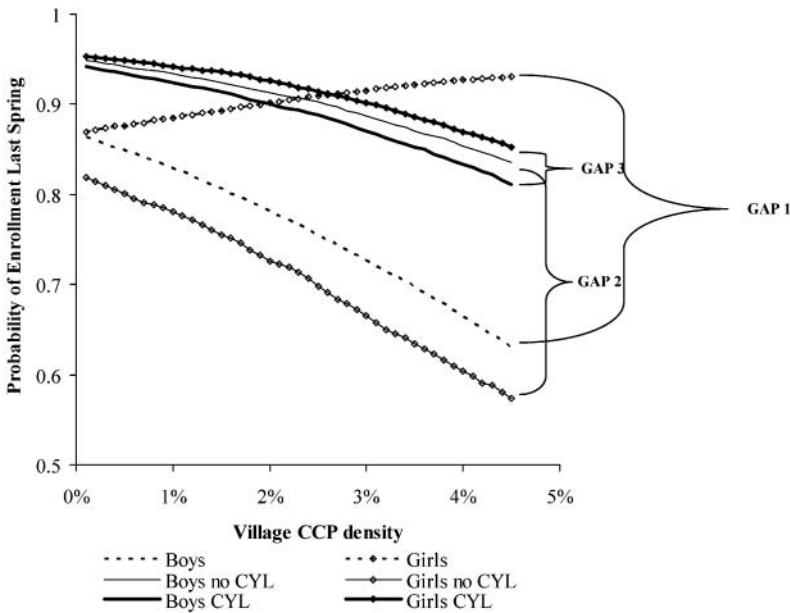
In conclusion we hypothesize that in villages with denser Party networks, parents are more often in contact with township and county officials who may suggest that the returns on education are low in a local economy with few job opportunities for middle school graduates. Unless they perform exceedingly well in the classroom and are financially able to continue on to high school, boys can expect low net returns from a middle school education, particularly since they can count on inheriting the “use rights” of their parents’ land. In contrast, girls are expected to marry – often out of the village – and not inherit the land, which makes their educational attainment more valuable. While we recognize that this interpretation does not conform to the usual interpretation of League and Party membership, it does fit with studies in agrarian communities in capitalist economies in other parts of Asia and Africa. Thus for example in the Philippines, Ghana and Indonesia parents make trade-offs between land inheritance and investment in education, with the results that girls may get more education than their brothers when parents assume sons will remain on the land and girls will need to enter the paid labour force.⁴⁷ In Gaoyuan where sons and not daughters remain in the village after marriage and thus functionally

47 Jonna P. Estudillo, Agnes R. Quisumbing and Kejiro Otsuka, “Gender differences in land inheritance and schooling investments in the rural Philippines,” *Land Economics*, Vol. 77, No. 1 (2001), pp. 130–40.

inherit land use rights, one can see how parents in villages with the densest Party networks might receive the more accurate if not politically correct information that more education is not always the best choice. The result would then be that children in high density Party villages whose parents are not League members would be at greatest risk of leaving school because there would be no counterbalancing political messages at home, while both boys and girls who had both parents in the League would be relatively unaffected.

Figure 6 illustrates graphically how our data support this hypothesis for gender-specific interactions between village-level Party density and parental membership in the Youth League. In these Monte Carlo simulations in which only CCP density varies one observes a wide and increasing gender gap in favour of girls (GAP 1). However, once we account for the multiple gender interactions with our various independent variables (held at their sample mean), boys retain an underlying advantage and children of both sexes are more likely to leave school in villages with dense Party networks. However, when we contrast the

Figure 6: **Monte Carlo Simulations of the Impact of Village CCP Density of Enrolment**



Notes:

Simulated probabilities using 1,000 replications in clarify. The simulations labelled "boys" and "girls" set all variables—including dummies—at the sample mean. Thus, only the specific of Party density and single gender interaction with village Party density term are allowed to vary. In the other simulations, all continuous variables were set at their mean, dummy variables were set at the integer closest to the mean, while varying the variables of interest along with *all* gender-interacted terms as one shifts from village CCP density and gender. "No CYL" implies that neither parent is assumed to have joined the League, while CYL assumes that both parents are/were CYL members. Stata do files are available from the authors upon request. Robert Person's assistance is gratefully acknowledged.

simulations where neither parent had ever been a member of the CYL (GAP 2) to those where both parents are/were League members (GAP 3), the forecasted gender gap not only virtually disappears, but the negative impact of Party density is also greatly attenuated: At the maximum of 4.5 per cent CCP members, we still expect 90 per cent of children of Youth League members to remain in school, against about 80 per cent for boys in non-League households and only 70 per cent for girls in ordinary households.

These results strongly suggest that Youth League and Party membership have distinct functions and that the Youth League is not a substitute for the Party. Instead, in the context of adolescent education in 2004, past membership in the League during the Mao years reinforces core state policies about the value of secondary education for sons and daughters, while contemporary Party connections at the village level appears to offer information that undermines parental investment in a son's education. Although a single survey can not make definitive claims, we believe that the strength of our results suggests that subsequent research on educational investments and outcomes employ theoretical frameworks that not only model a range of financial and cultural capitals at household and village level, but also explicitly assess the impact of the socialist legacy in terms of League experience as well as the contemporary role of Party membership and organizations within the context of the local community.