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Does Gender Matter?

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Household Assets, School Enrollment and Parental Aspirations for Children's Education in Rural China: Does Gender Matter?

Using rural household data from the China Household Income Project (CHIP) 2002, this paper provides an analysis of different effects of household assets independent of family income on children's school enrollment and parental aspirations for education, examining both outcomes by child's gender. The study first compares the responsiveness of boys' and girls' enrollment to the improvement of household assets, measured as liquid assets and net worth, relative to family income. The multivariate regression analysis further detects the effects of household assets on both boys' and girls' school enrollment and parental aspirations for children's future education by child's gender. Statistical results show that, compared to family income, household assets matter more for girls' schooling than for boys'. In addition, household net worth is significantly associated with parental aspirations for children's education regardless of gender. This study, albeit exploratory, sheds light on child welfare and education policies in rural China.

Key words: *household assets, gender, family income, schooling*

Introduction

Gendered educational disparity in developing countries is well-documented (Filmer, 1999; Lloyd & Blanc, 1996; Stromquist, 1989). Research has shown that girls are often disadvantaged in educational participation and achievement. Compared to boys, they are at higher risk of dropping out of school and less likely to pursue a post-secondary education (Lantican, Gladwin, & Seale, 1996). In China, rapid economic growth over the past decades, combined with dramatic social and ideological transitions, has substantially advanced gender equality in many respects. Nonetheless, gender gaps in schooling still exist, particularly in rural areas. Despite the improved enrollment of girls in elementary education due to the enactment of compulsory education laws, gender disparities at higher levels of education in rural China are striking (Hannum, 2005; Song, Appleton, & Knight, 2006).

Among a variety of factors affecting girls' disadvantages in schooling, family-related characteristics have begun to receive more attention relative to school-related factors (Buchmann & Hannum, 2001; Stromquist, 1989). While earlier studies focus on external factors such as distance to school and quality of educational facilities, recent literature places more emphasis on the impact of family background on educational stratification, especially the role of household economic circumstances. The household welfare framework was developed in an attempt to explain the relationship between household economic circumstances, family strategies, and gendered educational outcomes (Papanek, 1985; Schultz, 1995). It proposes that better household economic circumstances, by increasing incentives for families to invest in girls' education, may lead to greater gender equality in educational outcomes at various levels (Papanek, 1985). The assumption is that when families gain more economic resources, they face less stringent economic pressure to choose whom among their

children to educate. It also implies that parents living in better-off household economic circumstances may have higher and more equitable aspirations for their children's future education.

Research over the past three decades has provided empirical evidence to support the household welfare framework. For instance, studies have found that girls' educational opportunity responds more strongly than boys' to improvements in household economic status (Filmer & Pritchett, 1999a; Schultz, 1995). Nonetheless, with a few exceptions (Filmer, 1999; Filmer & Pritchett, 1999a), most studies measure household economic resources using household income and do not attend to household assets that may have long-term and different effects on children' schooling outcomes by gender. A growing body of research in the existing literature has shown that parental assets, independent of income, are significantly associated with children's educational attainment (Conley, 2001; Huang, Guo, Kim, & Sherraden, 2010; Zhan & Sherraden, 2003). The consideration of household assets in explaining the underlying mechanism of the relationship between household economic circumstances and children's well-being is an important extension of the existing explanatory frameworks that focus almost exclusively on income indicators.

The current study aims to bridge this research gap by including household assets in the investigation of the effects of household economic resources on children's school enrollment and parental aspirations by child's gender. Based on household survey data from the China Household Income Project (*CHIP*) 2002, this study expands on earlier studies by 1) investigating the responsiveness of boys' and girls' schooling to increases of household assets compared with those of household income; 2) exploring the effect of household asset holding, measured as liquid assets and net worth, on boys' and girls' school enrollment; and 3) investigating the effect of household assets on parental aspirations for children's education by gender. This study helps to reveal the potential gender effect of parental asset holding on children's educational outcomes and contributes to the existing literature on asset welfare effects (Paxton, 2001; Sherraden, 1991).

Background

Education is considered an important mechanism for social mobility (Blau & Duncan, 1967; Breen, 2004). Less privileged groups such as the poor, racial minorities, and women, however, face more obstacles in accessing educational opportunities and achieving higher educational goals. Disadvantages in education are particularly pronounced for females in many developing countries (Filmer, 1999). Past research on education and social stratification has identified various factors affecting gendered educational disparities in which the *demand* for education and *supply* for schooling are two main explanatory directions (Buchmann & Hannum, 2001; Stromquist, 1989).

The "supply side" approach investigates gender gaps in schooling by looking at factors derived from the educational supply and focuses mainly on school-related characteristics and local community resources such as school quality, educational accessibility, and community economic development. Research in developing countries has demonstrated significant effects of school characteristics on educational participation and achievement, especially for girls (Heyneman, 1976). The improvements in school location, materials, and per pupil budget have been identified as factors that would increase girls' school participation (Hill & King, 1993). Additionally, community development factors may condition girls' educational opportunities. Recent research has examined the effects of

community socioeconomic characteristics such as village income on gender gaps in education (Hannum, 2003).

The second prominent explanatory approach emphasizes the "demand side" of education by analyzing the impact of family-related factors such as parental education, household socioeconomic status, and family structure and size. While school factors are important, some cross-national studies have shown that the estimates of school-related effects might be relatively small compared to household welfare impacts (Filmer, 1999). Research on wide-ranging developing countries has found that girls' educational participation responds more strongly than boys' to improvements in household economic conditions than boys'. For instance, Behrman and Knowles' (1999) study has demonstrated that the income elasticity of demand for girls' schooling is higher than that of boys (Behrman & Knowles, 1999). Using household data from 35 countries in Africa, the Middle East, and South and East Asia, Filmer and Pritchett's (1999) study has found a significant association of household wealth with female disadvantage in education in most countries in terms of male-female enrollment both as measured in percentages and as a ratio of males to females. Studies based on data from individual countries have shown similar patterns of the effects of household economic status on gendered disparities in schooling (Appleton, 1995; Schultz, 1995; Song, Appleton, & Knight, 2006; Stromquist, 1989).

It has been argued that the decision to invest in children's schooling reflects specific family survival strategies conditioned on household economic resources. In a perfect credit market, education is a pure investment and children's educational opportunities are equally distributed across households. However, in reality, low-income households may face serious credit constraints on human capital investments (Filmer & Pritchett, 1999). Parents in poor households tend to invest in children's education to maximize economic returns in the future. While boys often have labor market advantages and are expected to provide parents' old-age support in many societies, their education is prioritized by credit-constrained poor households (Song et al., 2006). On the other hand, improvements in household economic circumstances may result in a change in family strategies. Research has shown that better household economic conditions are generally accompanied by more gender equitable household decisions regarding children's education, and therefore household wealth is far more decisive for girls than boys (Davis, Landry, Peng, & Xiao, 2007).

In China, girls' education has improved since the establishment of the Communist regime in 1949, particularly after the enactment of compulsory education in the mid-1980s (Zou, Moen, & Tuma, 1998). Nonetheless, while enrollment at the elementary school level is almost universal, gender disparities remain at higher educational stages. For instance, one study using household survey data in Gansu, a province located in northwest China, finds that although almost all the children were enrolled in primary school in 2000, the risk of being out of school four years later was about 39% higher for girls than for boys (Zhang, Kao, & Hannum, 2007). Song, Appleton, and Knight's (2006) study showed a gender gap in school enrollment at the upper secondary school level compared to the primary level. In addition, parents in rural areas generally have higher educational expectations for boys than for girls (Li & Tsang, 2003).

The rising educational costs associated with the market-oriented educational reform implemented in the late 1970s have increased the economic burden of education for poor households, which may negatively affect girls' schooling in particular. Following the collapse of the commune system, the

household has become the most important financial unit of children's education in rural China, with poor households encountering great difficulties in affording their children's education-related costs. Research has shown that education costs represent the largest expenditure for Chinese households in general, and are one of the main reasons that children drop out of school in many rural areas (Lu & Wei, 2004). Children from households that are both poor and credit constrained are three times as likely to drop out of school than those from households with better economic circumstances (Brown & Park, 2002), and girls' schooling is especially vulnerable in poor rural households.

In addition to household economic circumstances, cultural norms on gender and transitions in the labor market since the reform may reinforce girls' disadvantages in education. In Chinese culture, women traditionally have lower social status than men. Sons are expected to provide old-age support to their parents and remain with the family of origin, whereas daughters typically leave the household when they marry. Investment in their sons' education means long-term security for parents in many rural settings (Hannum, 2003; Li & Lavely, 2003). Additionally, the increasing labor market opportunities after the reform may be favorable for boys with higher educational credentials (Summerfield, 1994). Research has found that girls are more likely to concentrate on agricultural work or drop out of school at an earlier age to seek industrial jobs in cities (Zheng, Niu, & Xing, 2002). Parents in rural areas tend to expect less schooling for girls as compared to boys, especially when encountering household resource constraints.

While much scholarly attention has been paid to the relationship between household economic circumstances and educational inequalities by gender, the existing studies have focused primarily on the effects of family's short-term economic status such as household income rather than on long-term economic resources such as liquid assets and net worth. Earlier analyses have not established if different types of household economic resources may produce different effects on educational inequality when assets are considered. For instance, while earlier studies find an association between girls' schooling and household economic circumstances, no research has been conducted to differentiate household assets from household income in relation to the gendered schooling gap. In addition, few attempts have been made to explore the effects of household assets on parental aspirations for education. As an important predictor for children's future educational performance, parental aspirations may be correspondingly associated with family strategies of educational investment on children. Therefore, this study, by considering different types of household economic resources along with the child's gender, aims to investigate the effects of household assets on children's school enrollment and parental aspirations for children's education in rural China.

Methods

Data

The sample is drawn from the China Household Income Project (CHIP) 2002, a national cross-sectional survey collected by the Institute of Economics at the China Academy of Social Sciences (CASS) (Li & Knight, 2004). Adopting a multistage-stratified probability sampling procedure, the CHIP survey collected household data covering provinces from eastern, central, and western regions of China. The CHIP contains detailed records of household socioeconomic information and enrollment-status variables, and is considered one of the best publicly available data source on household expenditure, income, and assets in China (Gao & Riskin, 2009). The current study uses

the CHIP rural household data, which comprises a total of 9,200 households and 37,969 individuals. To investigate children's school enrollment, we use a subsample of children aged 7-16 with valid responses on all relevant variables, yielding a sample size of 5,677 children from 3,931 households.

Measures

The two dependent variables in the study include children's school enrollment and parental aspirations for children's education. Following Hannum (2005), school enrollment of children aged 7-16 is measured by a dichotomous variable with a value of 1 indicating "currently enrolled" and 0 indicating "never enrolled" or "having dropped out from school." If a child is enrolled, his or her parents are asked about their aspirations for this child's future education. Here we focus on parental aspirations for children's college-level education because of the importance of college aspiration for actual college enrollment and, consequentially, upward social mobility (Elliott III, 2009; Zhan & Sherraden, 2003). We treat parental aspirations as a dummy variable with 1 indicating "college education and above" and 0 "less than college education."

The major independent variables are household assets and family income. Two forms of household assets including liquid assets and net worth are the focus of this study. Liquid assets in the CHIP are calculated as the sum of different types of financial assets, such as savings, CDs, stocks, and bonds. Net worth is the total amount of household asset values including liquid assets, productive fixed assets, durable goods, and other assets net of home equity and unsecured liabilities. We do not include home equity or home ownership as the real estate market in rural areas is in general not well-developed compared to urban areas. Family income is the amount of income in the year 2002 from various sources including business profits, agricultural income, subsidies, social support benefits and other types of income. As asset and income variables are all quite skewed, we use the natural log of these measures in regression models. To avoid missing values, we recode assets and income with a value of 0 to a value of 1.

Control variables include parental (mother) demographics, child's age, child's age squared, and academic performance, as well as other household characteristics. Following previous studies (Zhang et al., 2007), we include mother's marital status (1=married, 0=not married), education (1=high school or above, 0=below high school), and employment status (1=employed, 0=not employed) into the analysis. The child's academic performance is often considered an important control in predicting the effects of household economic resources on schooling and parental aspirations (Brown & Park, 2002; Zheng et al., 2002). Academic performance is categorized into excellent, good, and fair, and then recoded as two dummy variables with "fair" as the reference group. Other controls include household size, householder's membership in the Communist party, and provincial region. Household size is a continuous variable. Provincial region is categorized as western, central, or eastern region. In this sample, western regions include Guangxi, Hainan, Sichuan, Yunan, Tibet, Gansu, Qinghai, Ningxia, and Xinjiang. Central regions include Jiangxi, Hebei, Shanxi, Anhui, Henan, Hubei, Hunan, and Shaanxi. Eastern regions include Beijing, Liaoning, Jilin, Heilongjiang, Shanghai, Jiangsu, Zhejiang, Shandong, and Guangdong. This division also reflects the imbalance of economic development across different geographic regions in China, among which the eastern region was considered the most developed and the western region the least developed.

Analytic strategies

The first set of analyses aims to investigate how responsive girls' schooling is to household economic circumstances. The descriptive analysis presents the distribution of girls' school enrollment in different categories of household assets relative to family income. In the second set of analyses, logistic regression models are used to estimate the effect of household assets on children's school enrollment by gender after controlling for family income and other variables. We enter variables in steps in order to provide better understanding of different model specifications on assets. We first examine the association of family income with children's enrollment. Then we add liquid assets and net worth separately to the model. The third set of analyses examines the association of household assets with parental aspirations for girls' education relative to boys'. Logistic regression is used to predict the effect of household assets on the probabilities of parental aspirations for children's college education. As in the second set of analyses, we enter two forms of assets—liquid assets and net worth—separately.

Results

Descriptive statistics

Table 1. Sample characteristics *(N=5,677)*

Variables	Mean (Median) or Proportion	SD
Dependent Variables		
Enrolled in school		
Overall (aged 7-16)	92.9%	
College aspiration (N=5,241)		
Under college education	20.95%	
College education and above	79.05%	
Child Characteristics		
Age	12.7(13.0)	(2.6)
Female	45.0%	
Academic performance		
Fair	55.5%	
Good	37.4%	
Excellent	7.1%	
Mother's Characteristics		
Mother's marital status (married)	99.2%	
Mother's employment status (employed)	84.3%	
Mother's education (high school and above)	90.6%	
Household Characteristics		
Household size	4.6(4.0)	(1.1)
Householder's membership of the Communist Party	13.9%	
Geographic region		
Eastern	27.2%	
Central	42.9%	
Western	29.9%	
Family income (Yuan)	10,530.1(8,648.0)	(8,458.0)
Liquid assets (Yuan)	6,543.2(2,920.0)	(10,987.3)
Net worth (Yuan)	34,974.5(25,768.0)	(38,969.7)

Table 1 reports the sample characteristics. Of the total surveyed 5,677 children ages 7-16, 45% were female and the average age was 12.7. Overall, the majority of school age children (92.9%) were enrolled in school, but less than ten percent of children (7.1%) stated that their academic performance in school was excellent. The majority of mothers were married, employed, and held a high school degree or above. Overall, parents showed relatively high aspirations for their children's future education. Most parents (79%) wanted their children to go to college. The average household size (4.6) was comparable to national census data (4.3) in 2000 (National Bureau of Statistics, 2001). About 14% of household heads were members of the Communist Party of China. The average household liquid assets and net worth were 6,543 Yuan and 34,974 Yuan (approximately 1,022 USD and 5,465 USD based on the exchanging rate of 1 USD=6.4 Yuan) respectively. The mean of family income (10,530 Yuan, approximately 1,645 USD) was between that of liquid assets and of net worth. Both liquid assets and net worth showed a greater standard deviation than the income measure.

More descriptive statistics shown in Table 2 present the responsiveness of girls' and boys' schooling to improvements in household economic conditions. We examined school enrollment rates across different family income and household asset categories. The girls' enrollment rate (91.9%) was overall lower than the boys' rate (93.6%). With respect to enrollment differences among income groups, Table 2 indicates that the gender gap in school enrollment in the bottom quintile (3.4%) was greater than that in the top quintile (3.0%). When using asset categories to detect gender differences in schooling, the data show that there was a 3.7% gap between girls in the bottom fifth and top fifth of liquid assets compared to a 0.6% gap for boys. Similarly, compared to boys (2.9%), a larger improvement in school enrollment for girls (5.5%) was shown when net worth increased from the lowest to the highest group. These results suggest that girls' educational participation may respond more strongly to the improvement of household assets than to improvements in family income. Thus, household assets as long-term economic resources may serve as a better indicator for predicting girls' schooling than income.

Table 2. Children's school enrollment rates by household economic resources and gender

Household economic resources	I: Family Income and enrollment		II: Liquid Assets and enrollment		III: Net Worth and enrollment	
	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)
Quintile						
Top fifth	94.2	91.2	94.1	93.8	95.8	95.0
Fourth	93.7	92.2	94.0	91.6	92.9	91.6
Third	91.7	92.2	92.9	93.0	93.5	92.5
Second	93.4	92.2	93.7	91.2	93.0	91.3
Bottom fifth	95.3	91.9	93.5	90.1	92.9	89.5
Overall	93.6	91.9	93.6	91.9	93.6	91.9
N	3124	2553	3124	2553	3124	2553

Regression analysis

School enrollment. In Table 3, we estimate logistic regression models to predict children's school enrollment by gender. In these analyses, we run separate models for each sex to detect the effects of different factors on children's enrollment and make direct comparisons (Fox & Faver, 1985). Children's other individual and household characteristics are controlled for.

Table 3. Logistic regression results on girls' and boys' school enrollment

	Girls			Boys		
Variables	Model I	Model II	Model III	Model I	Model II	Model III
Family income	0.182**	0.153	0.096	0.049	0.050	-0.024
Liquid assets		.060*			-0.001	
Net worth			0.161***			0.114**
Children's age	-0.955	-0.910	-0.885	1.601**	1.601***	1.597**
Children's age squared	0.001	0.005	0.003	-0.088***	-0.088***	-0.088***
Children's academic performance (fair)						
Good	1.030***	1.033***	1.025***	1.128***	1.128***	1.124***
Excellent	2.659***	2.653***	2.622***	1.977***	1.977***	1.963***
Mother's marital status (not married)	0	0	0	0.222	0.221	0.221
Mother's employment status (not employed)	-0.139	-0.148	-0.122	-0.075	-0.075	-0.055
Mother's education (below high school)	-0.015	-0.039	-0.037	0.882***	0.882***	0.910**
Household size	-0.036	-0.033	-0.033	-0.085	-0.085	-0.077
Party membership (No)	0.095	0.106	0.109	0.321	0.321	0.323
Geographic region (Eastern)						
Central region	-0.098	-0.150	-0.054	-0.710***	-0.710***	-0.723***
Western region	0.024	-0.001	0.073	-0.135	-0.135	-0.128
Constant	12.880*	12.432*	11.639*	-1.529	-2.410	-2.853
Pseudo R^2	0.239	0.241	0.247	0.245	0.245	0.245
N	2530	2530	2530	3124	3124	3124

*p<0.1, **p<0.05, ***p<0.01

In the regression results for girls, the base model (Model I) indicates that family income was positively and significantly associated with girls' school enrollment. Models II and III introduced asset indicators to the base model and tested asset effects after controlling for income and other confounding factors. Results from Model II shows that there was a significant association of girls' enrollment with liquid assets. More liquid assets increased the possibility of girls enrolling in school. After including liquid assets in the analysis, the coefficient size of family income was reduced and became insignificant, suggesting that the effect of family income on girls' enrollment can be partially explained by household liquid assets. The effect of net worth was tested in Model III and, similarly, we found that the association between family income and girls' enrollment was no longer significant. These results suggest that household assets may play a more important role in determining girls' schooling than family income.

Regression Models I and II on boys' schooling show that neither income nor liquid assets were significantly associated with their enrollment. However, net worth in Model III had a statistically positive relationship with the likelihood of school enrollment for boys, but its regression coefficient was smaller than that for girls in Model III. The results suggest that family income and household assets may have an effect particularly on girls' schooling, which reinforces the notion that household economic circumstances matter more for girls' schooling than boys' (Stromquist, 1989). In rural areas, education investment for boys may be prioritized by parents regardless of income or assets. However, girls' schooling tends to be highly constrained by household economic circumstances, especially household assets. It is worth noting that children's academic performance had a significant positive association with their enrollment regardless of gender. This finding is consistent with existing research that suggests that improved academic capability decreases the possibilities of dropping out of school (Zheng et al., 2002) for both girls and boys. In addition, boys living in the central region and whose mothers had less than a high school education were more likely not to be enrolled in school.

Educational aspiration. Given that household assets are important economic resources particularly for girls' enrollment, our research also asked if more parental asset holding may lead to more gender equitable aspirations for enrolled children' future education. Parental aspiration is considered an important predictor for children's actual educational attainment and reflects family strategies in children's educational investment (Zhang, Kao, & Hannum, 2007). As educational aspiration is a dichotomous variable, we modeled another logistic regression to investigate asset effects when controlling for family income and other variables. Similar to regressions on children's school enrollment, we ran separate models for girls and boys. The analysis results are shown in Table 4.

The base models in Table 4 show that after controlling for other relevant variables, family income had a significant association with parental aspirations for both girls' and boys' college education. When introducing asset variables into models, household net worth, independent of family income, was positively and significantly associated with parental aspirations regardless of the child's gender. The results suggest that better household economic circumstances measured either as family income or net worth increased parental aspirations for both girls' and boys' future education. This contrasts somewhat with findings from previous studies that indicated family wealth only has a significant effect on mother's aspirations for boys but not for girls (Zhang et al., 2007). It is worth noting that a supplemental analysis (not reported in the paper) found that parents in general expect boys to have higher levels of education than girls ($p<0.001$, $B=0.370$) when different educational levels including middle school, high school, and post-secondary education were used to predict parental aspiration in the sample.

Statistical results in Table 4 also indicate other factors that may be associated with parents' educational aspirations. Parental aspirations for children's college education for boys in particular were likely to be higher when children had strong academic performance, the mother was married and had a higher level of educational attainment, and a member of the family belonged to the Party. In contrast, larger household size and living in the west region were associated with lower educational aspirations among parents.

Table 4. Logistic regression results on parental aspirations for girls' and boys' education

	Girls			Boys		
Variables	Model I	Model II	Model III	Model I	Model II	Model III
Family income	0.189**	0.172**	0.132*	0.174**	0.162*	0.111
Liquid assets		0.038			0.020	
Net worth			0.110***			0.118***
Children's age	-0.219	-0.226	-0.194	-0.181	-0.185	-0.185
Children's age squared	0.008	0.008	0.007	0.006	0.006	0.006
Children's academic performance (fair)						
Good	0.543***	0.542***	0.536***	0.527***	0.526***	0.520***
Excellent	0.756***	0.758***	0.734***	1.012***	1.011***	1.004***
Mother's marital status (not married)	0.492	0.531	0.526	0.812*	0.823*	0.864*
Mother's employment status (not employed)	0.147	0.152	0.155	0.139	0.142	0.157
Mother's education (below high school)	0.851***	0.840***	0.867***	0.367***	0.365*	0.409**
Household size	-0.249***	-0.248***	-0.253***	-0.189***	-0.190***	-0.181***
Party membership (No)	0.112	0.113	0.114	0.402**	0.401**	0.395**
Geographic region (Eastern)						
Central region	-0.022	-0.042	0.008	-0.086	-0.099	-0.073***
Western region	-0.464***	-0.484	-0.434	-0.622***	-0.631***	-0.592***
Constant	1.248***	1.141***	0.502	1.052	1.034	0.380
Pseudo R^2	0.055	0.056	0.059	0.054	0.055	0.058
N	2332	2332	2332	2909	2909	2909

*p<0.1, **p<0.05, ***p<0.01

Discussion and Conclusion

Using data from the China Income Project (*CHIP*) 2002, this study investigates the effects of different types of household economic resources on child's school enrollment and on parental aspirations for education, examining both outcomes by child's gender. The descriptive results show that girls' school enrollment responds to the improvement of household assets more strongly than that of boys. Controlling for family income and other relevant variables, household assets, measured as liquid assets and net worth, have positive impacts on girls' schooling relative to boys'. When it comes to parental aspirations for children's education, better household economic resources are meaningful for both girls and boys. More household asset holding, independent of family income, is associated with a positive change in parental attitude toward girls' future education. Although

parents in rural China in general hold lower educational aspirations for girls than boys, the improvement of household assets benefited all children regardless of gender.

These findings have important implications for child welfare and educational policies in rural China. Education is regarded as one of most important strategies to achieve social equality. However, due to poverty and cultural biases in many developing countries, girls are often disadvantaged in terms of educational participation and achievement. Since the implementation of a compulsory education law, girls' school enrollment in China has improved significantly. The gender gap in school enrollment at the primary education levels has decreased sharply compared to the gap in earlier decades (Hannum, 2005). Nonetheless, poor families still face remarkable barriers to continuously supporting their children's education due to the increasing educational costs associated with the market-oriented reform since the end of 1970s. When households lack sufficient and stable economic resources, parents in rural areas are more likely to sacrifice girls' instead of boys' educational opportunities to increase economic returns (Buchmann & Hannum, 2001). While improving family income is important, more emphasis should be placed on augmenting household asset holding, which may have important effects on girls' education. Regarding policy, action should be taken to ensure that families have stable and future-oriented economic resources to encourage equal educational participation of girls and boys, and better educational outcomes for both genders. Some asset-based policy programs such as Child Development Accounts could be implemented for building household assets for children's long-term development (Loke & Sherraden, 2009).

The limitations of this study should be noted. First, the cross-sectional data used in this study are unable to track changes in children's educational outcomes, which may constrain the explanatory capability of the analytical models. For example, it is possible that higher parental aspirations for children's education led to more family concerns about household economic circumstances, which in turn increased asset accumulation. Future research should use longitudinal data to gain a more advanced understanding of the underlying causal relationship between household assets and children's education. Second, due to limitations in survey design, we were not able to include additional mediating factors that may have gendered effects on children's schooling and parental aspirations for children's education, such as parental gender attitudes and community characteristics. It would also be interesting to include more external economic and social factors including changes in educational policy in the analysis of the association between household assets and children's educational outcomes.

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