

# Gender Inequality in Chinese Family Wealth Allocation

Jiake Xie, Tianqing Zheng, and Kaiyun Wang

**Abstract**—This paper discusses the gender inequality issue in terms of wealth allocation within contemporary Chinese families and aims to find out the reasons and mechanisms lying behind gender discrimination in families. Fixed effects model is adopted in this paper to explore the relationship between gender difference and wealth allocation equality, in both urban and rural contexts. The results show that at the present stage, there is a correlation between the residential values and the children's gender within rural families and this can be explained by the effect of having children of different genders on family spending and saving decisions, while urban families will not have large fluctuations in consumption and income due to the gender of their children. However, in other aspects of household wealth, the allocation among children of different genders is relatively equitable overall, both in rural and urban areas.

**Index Terms**—Gender inequality, Chinese family, wealth allocation among children.

## I. INTRODUCTION

Human capital and intellectual capital are considered as two layers of components of household wealth, with financial capital being used to support them [1]. The human capital of a nuclear family is composed of each family member, generally including two generations, namely parents and children. Unlike, the intellectual capital is attached to human power, which is mainly manifested in personal knowledge and cognitive ability [2]. Thus, how a family allocates financial capital to each member for material and spiritual enrichment is a subject worth studying, especially in developing countries with rapid development, like China. Although it is difficult to accurately measure the distribution of resources among siblings [3], the different allocation of wealth between sons and daughters reflects gender preferences in families to some extent.

Admittedly, gender bias under the influence of traditional concepts has led to the long-term relative disadvantage of females in China [4]. Benefited from rapid economic growth increased access to education since the 1970s, the status of women has improved [5]. However, even in the context of contemporary Chinese society, gender discrimination has not been eliminated, especially in rural areas, where children competing with siblings for educational resources and financial support, and therefore, educational costs have been a burden to be reckoned with for most rural families [6].

Differences in family investment in children's education may be reflected in traditional attitudes about the role of women and in measures of educational returns for different genders [7]. The view of Michelson and Paris [8] also bears out this perspective, that is, women are perceived to be less able to contribute to the family cash income, it is not essential to provide girls with the same education as boys. The second interpretation for gender differences in investment in children focuses not only on parental values and attitudes towards girls but on decisions made in the labor market and in the wider world of adult life that may treat girls and boys differently. For instance, referring to rural Bangladesh, Mahmud and Amin [9] argues that the marriage market, rather than the labor market, must be seen as the means of economic return and the main motivation of girls' education. Therefore, in addition to the educational investment, there is an obvious gender bias existing in the household saving incentives. For example, affected by the high sex ratio from gender discrimination, the household savings for the purpose of improving the competitiveness of sons in the marriage market largely explained the high saving rate of traditional Chinese families [10]. Since the beginning of the agricultural society, relying on the 'monopoly' formed by their stronger physical conditions, men have become the main force of earning [11], and therefore, based on the parent's sense of high reward of sons for the family economy [12], early investment in children's intelligence and the distribution of family assets in adulthood tend to be skewed towards male heirs.

Several studies have documented the unequal resources allocation among families' children, with distinct findings in China and Europe. For example, Grätz, M. [13] measured educational inequality within families using the data from the Socio-Economic Panel Study of Germany and found that there are three possible investments in human capital. First, parents make the same level of investment in all children equally. Second, for maximizing investment returns, parents devote more to the better-endowed child [14], [15]. Third, to bridge the gap between their children, parents invest more in the less able child [16]. Unlike, gender has a certain influence on the allocation of resources in traditional Chinese families. For instance, Wei & Zhang [10] performed a regression analysis between the saving rates of different households and the sex ratio in the region and put forward the evidence that sex ratio imbalance affects competitive savings of households, that is, parents save to improve the competitiveness of sons' marriage.

Apart from the method of resources allocation between different genders from the perspective of household consumption, a development concept also deserve consideration, that is, the changes of household savings or investments over the coming decades for families with children of different sexes. For example, if a family with a

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boy purchases a house in the next decade, while a family with a girl does not, this could indicate that the purpose for this purchasing behavior may be attributed to a property to enhance the marital competitiveness of the son. This research perspective has been applied in Wei & Zhang's [10] research, that is, the difference found by comparing the gender composition of children in different families and tracking the family's saving data over decades illustrate the phenomenon that families have different wealth accumulation due to different gender of children. Therefore, this paper will analyze household wealth allocation from the perspective of combining current consumption (or investment) with future income (or wealth accumulation). However, current household consumption is difficult to be accurately observed, so a change of further income and wealth within different families will be powerful evidence of gender discrimination.

Thus, this paper focuses on several questions. First, whether the allocation of wealth among children in a family is affected by gender in contemporary China? If so, what are the effects of different household characteristics on the wealth allocation gap between sons and daughters? For further exploration, whether mothers' education level has an impact on the equity of wealth allocation among their children? Hence, the following hypothesis could be made, the wealth allocation particularly regarding the house values among families tends to favor sons over daughters. The higher the economic level of the family and the educational level of the parents, the fairer the allocation of wealth among the children of the family. Among them, the mother's education level has a greater impact on equity. The allocation of wealth within households in urban areas is more equitable than in rural areas. However, the research has shown otherwise.

In this paper, we come to the following conclusions. First, in rural areas, families with boys own more residential values than those with girls, while urban families show the opposite, that is, families with girls tend to have higher net values and residential values. Second, in rural areas, the more educated the mother, the higher the gender discrimination within the family, and unexpectedly, the more educated the father, the lower the gender discrimination. However, in the cities, no significant correlation between parents' educational level and gender discrimination degree is found.

Some previous studies on gender discrimination scenarios within families were carried out in the past decades. For instance, Hannum, E., Kong, P., & Zhang, Y. [17] conducted fieldwork with rural families in Gansu province from 2003 to 2005 showed that most mothers expressed egalitarian views about the rights and abilities of boys and girls in general, possibly stemming from educational campaigns in the countryside. However, the vast majority of mothers still wanted their sons to provide for them in their old age. Besides, when it came to attitudes towards education, almost a fifth agreed that sending a girl to school did not work, suggesting that a significant proportion of families have lower educational expectations for girls than for boys. To its credit, there are no significant gender differences in economic investment in education, and girls are on a par with boys in academic performance. Overall, the study shows that although some outdated notions of gender discrimination have not been eliminated, the actual performance of families

towards their children's education, especially the financial expenditure, is more equitable. In addition, the differences in health between boys and girls are also noteworthy. In Gansu China, the preference for boys at birth and in early health has risen sharply. Without human intervention, the sex ratio at birth is about 106 in 1981, and then the proportion increased year by year and reached 119.35 in 1999 [18], which is extremely imbalanced, making the marriage problem in adulthood even more serious. Moreover, the risk of infant death also shows a worsening situation for girls, unlike the biologically expected elevated risk for men [18].

The inequality is reflected not only in the gender division of labor at home and in the workplace, but also sexist practices in the social system [19]. Despite strong central program from 1949 to 1978 and equality under the doctrine of socialist ideology, the Chinese government has promised to eliminate gender differences in the labor market, that is, all workers receive equal pay for equal work between men and women, leading to a sharp rise of female participation in the labor market, by more than 70% in the late 90s [5], [20]. It is an early attempt at gender inequality in China but has not been eliminated female dilemmas.

The issue of gender discrimination has been studied by scholars from all walks of life in different perspectives, including women's family environment, educational level, work position, and health status [10], [21], [22]. Wang [12] proposed that both two censuses in the 1990s showed a persistent preference for sons over daughters, which directly leads to the education imbalance within families, especially in rural areas. Furthermore, because of the low school enrollment, rural girls have the lowest level of education and the prematurely highest labor market participation. However, in contrast to their high labor market participation, the income level is lower, while better-educated sons tend to have higher earnings in the labor market, creating a vicious circle of household investment in women's educational resources and job expectations [12]. This study shows that there is an unfair investment in children's educational resources within families. Another study made by Shaffer & Oguz [21] on women's education indicates that an educated mother has a far greater impact on the health and education of her children than an educated father. Since the educational resource is a kind of wealth, financial investments in human capital, the education level of parents in a family is one of the important factors affecting the equality of children's wealth distribution. Moreover, since women play a more positive role in the upgrading of offspring than men, and meanwhile, human resource development and population growth factors are mainly attributed to the result of women's education. Thus, leaving aside the narrow criteria of economic productivity, the return on investment in women's education is far beyond that of men [21].

Although previous studies on gender discrimination in China have been abundant, there are few studies on the economic investment and wealth allocation differences based on gender within households. The financial assistance and investment that children receive from families, both materially and spiritually, affect their future development. Wei & Zhang [10] have studied the saving motivation of families to improve boy's competitiveness in the marriage market. but the further allocation of overall wealth remains to

be studied. Therefore, the significance of this paper is to fill this gap and to take a more comprehensive economic perspective on the allocation of children's wealth from the family dimension.

## II. DATA

The research data in this paper are mainly from the China Family Panel Studies (CFPS), which aims to reflect the changes in Chinese society, economy, population, education, and health through tracking and collecting data at three levels: individual, family, and community, and further provide data basis for academic research and public policy analysis. CFPS focuses on the economic and non-economic well-being of the Chinese residents, as well as a variety of research topics involving economic activities, educational outcomes, family relationships and dynamics, population migration, and health. It is a national, large-scale, multidisciplinary social tracking project. The CFPS sample covers 25 provinces/municipalities/autonomous regions, involving Beijing, Tianjin, Hebei, Shandong, Shanxi, Shaanxi, Heilongjiang, Jilin, Liaoning, Gansu, Jiangsu, Anhui, Zhejiang, Fujian, Shanghai, Guangdong, Guangxi, Hubei, Henan, Jiangxi, Sichuan, Yunnan, Guizhou, Hunan, Chongqing. The target sample size is 16,000 households, with the survey subjects including all the family members in the sample households. CFPS conducts preliminary and follow-up visits in Beijing, Shanghai, and Guangdong in 2008 and 2009 respectively, and officially launched the visit in 2010. All baseline family members and their future blood/adopted children identified by the 2010 baseline survey are tracked permanently as genetic members of the CFPS. There are four main types of CFPS questionnaires, including community questionnaires, family questionnaires, adult questionnaires, and children questionnaires. On this basis, CFPS has developed many types of questionnaires for different family members, such as long questionnaires, short questionnaires, representative answer questionnaires, and telephone interview questionnaires.

Given the data from CFPS, this paper integrates the data from 2010 to 2018, collating and calculating data on household wealth, including family income, house values, land assets, financial assets, and other assets. The allocation of household wealth serves as the dependent variable. In addition, the education of the family's children includes the school stage, whether the family has saved for their education, and the family's expectation of their education level, which will also be an important factor within the wealth allocation. Also, it includes medical costs and insurance preparation for children. Based on the previous hypothesis, families' economic status, mainly expressed in income level, will be the main factor affecting the allocation of children's wealth, and the mother's education level will also be an important indicator. Therefore, parents' income level and education level (especially mothers) will be the two most important independent variables.

As a preliminary data analysis, after adding up the family wealth, we calculate the net wealth, without disabilities. Moreover, we consider real estate as an important indicator as it is always the most important investment in Chinese families and is often an asset left for the future generation. To

distinguish between parents' current home and other houses that may be passed on to their offspring, we divided them into two variables: residential value (residual value in the graphs) and other houses' value.

In addition, the paper limits the age range of discussed children from 15 to 20. Since in China, nine years of compulsory education ends at the age of 15, that is, the cost of attending school is supported by the government until the age of 15, after that, families must pay for schooling themselves, starting at the high school level. Thus, from the age of 15, there will be a big difference in family investment in children's education, so we set 15 as the starting age to observe the allocation of household wealth. Apart from investment in education, another important gap in wealth distribution comes from the housing. In China, most real estate purchases are made to prepare for their children's marriage. Even though the legal marriage age for males in China is 22, in rural areas, the symbol of marriage is often a wedding banquet rather than a legal marriage certificate, and even in cities, families start to prepare for children's marriage from their age of 20, where a distinct wealth allocation occurs. As a result, combining the main nodes of education and marriage investments, we set the study age range of children between 15 and 20.

Moreover, in the choice of family composition, this paper mainly focuses on the one-child family. Since a one-child family has only one child, the gender of the child is relatively randomly generated, and the family cannot make gender selection. Compared with a second-child family, some families fail to give birth to a satisfactory gender child in the first child and may seek folk remedies during the second pregnancy, or even have an abortion. Even if the second child is born, the child may be treated differently due to psychological factors. For instance, in some rural areas, if the first child is not a boy and the second is also a girl, the family may inflict resentment and blame on the younger daughter. Furthermore, since the children we study are 15 to 20 years old, tracing back 20 years to China, in the early 2000s, when a one-child policy was carried out on a large scale, most families in urban areas could only have one child, leading to a result that enormous urban children in their 20s do not have siblings. Families able to have two children in those days often paid steep fines, so the sample is biased by the particular time and policies. Besides, it is more advantageous to carry out the control variable method to study families with only one child. Assume before having a child, families are homogenous, and then by comparing the household wealth changed after giving birth to a child, the role of child sex in changes in household wealth can be observed and conducted. Ultimately, the data of rural and urban areas are distinct due to various reasons, we studied them separately.

Thereby, by analyzing the wealth status of families with children of different genders, a summary statistic was conducted. In the urban data of Table I, comparing the first three rows of wealth, net wealth and residential value, the mean values of girls' families are all higher than that of boy's families, with 5349944.4 being compared to 515592.6, 530485.3 being compared to 501358 and 145291.8 being compared to 144647. However, the last two rows of mean values of other house values and family income of male families are higher than female families, with 38392.94 and

51429.08 of male families and 31750.87 and 50989.06 of female families. When it comes to the rural area in Table I, the situation shifts. The average of the first three, wealth, net wealth and residential value is 5.62%, 6.58% and 10.7% higher for boys' families than for girls' families respectively. For other houses' value, male households are also higher than female households, but the difference is not significant. For the last item of family income, the average income of male households is also higher than that of female households, with 3.16% higher. To sum up, in the urban data, the mean wealth, net wealth and residential value of female families are higher than that of male families. However, other houses' value and family income of female households are lower than those of males. In the rural data, every category of male households, including wealth, net wealth, residential value and other house values, and household income are more or less higher than female households.

TABLE I: SUMMARY STATISTIC

Urban						
	Male			Female		
	Mean	SD	#of observation	Mean	SD	#of observation
Wealth	515592.6	936631.6	2019	534944.4	1037728	1938
Net_wealth	501358	936882.2	2019	530485.3	1034268	1938
Residual	144647	355372.8	2102	145291.8	380054.8	2028
Other_houses	38392.94	250788.7	2101	31750.87	221025.3	2024
Family Income	51429.08	53025.26	2413	50989.06	51467.62	2279

  

Rural						
	Male			Female		
	Mean	SD	#of observation	Mean	SD	#of observation
Wealth	222861.4	300060.7	2591	210995.9	413973.3	2584
Net_wealth	213041.1	298558.1	2591	199882	412689.7	2584
Residual	58138.06	156024.3	2655	52520.66	109527.9	2660
Other_houses	8818.642	83794.47	2656	8814.205	109497.6	2663
Family Income	35609.87	36949.09	2980	34519.71	52073.65	2926

III. MODEL

The study aims to discover the effect of gender discrimination within families on wealth distribution for children, taking family income and the level of education of parents especially mothers into consideration. Based on the responses from CFPS, family economic survey, self-completion survey and parental substitute survey are the main data source for this paper, which focus on the family financial status as well as parents and children's living situations.

The wealth distribution ratio between sons and daughters is set as the dependent variable (Y). If the distribution of daughters is set to 1, then the ratio of the sons to daughters is the distribution of sons divided by 1, and thus Y stands for the proportion that sons obtain.

Two independent variables to be considered are family income (X<sub>1</sub>) and parents' / mothers' education level (X<sub>2</sub>). The coefficient of income and education level are presented by δ<sub>1</sub> and δ<sub>2</sub> respectively to estimate the effect intensity of family income and parents' education level separately on the children's wealth distribution ratio. Therefore, a function could be formulated.

This paper mainly uses the following Model for analysis:

$$Y = \delta_1 Gender + \delta_2 X_1 + \delta_3 X_2 + \epsilon$$

In this equation, X<sub>1</sub> stands for the control variables, which is the family income, while X<sub>2</sub> refers to the county fixed effects, with an error term ε followed behind.

IV. RESULTS

Based on the model above, regression analysis and further a robustness check between wealth, gender and family income are carried out. The following four tables take wealth, residential value, log wealth and log residential value as dependent variables respectively.

The Table II shows the regression relationship between wealth and gender. Regressing wealth to gender, the change in family wealth brought about by the birth of the first child can be observed, which corresponds to the developmental (income) perspective mentioned above, that is, the different effect of genders on the family wealth. Therefore, the impact of a child's gender on a family's wealth can be determined by comparing the growth rate of the wealth of different families over the 15-20 years after the birth of a child.

In the urban column (1) of Table II, the P-value is larger than 0.1, which means there is no significant relationship between gender and wealth in urban cities, suggesting that in urban areas, the wealth of a family does not differ much by the birth of a boy or a girl. However, the wealth allocation may be affected by the family income, as assumed in the hypothesis that the higher the family income level, the less difference between wealth allocation to children. Reflecting to the regression, the higher household income, the less obvious the correlation between gender and wealth should be. Therefore, the variable of family income needs to be controlled.

In the urban column (2) of Table II, after considering the family income, there is still no significant relationship between gender and wealth. However, there is a strong correlation between family income and wealth, which also explains the importance of introducing this control variable. In addition, there are great economic and social-cultural differences between different provinces and regions in China, and some common factors in a certain area may affect the wealth, therefore county fixed effects need to be added as another control variable.

In the third column (3) of the urban table, similarly, as before, there is still no significant correlation between gender and wealth when the county fixed effects variable was included. The changes of variables in rural areas are consistent with those in urban cities.

In the three columns (1) (2) (3) of rural areas, as before in the cities, no strong correlation was found between gender and wealth. However, the last two columns (2) and (3) show that there is a strong relationship between family income and county fixed effects on wealth in rural areas, which reaffirms the necessity of including them.

TABLE II: REGRESSION BETWEEN WEALTH / RESIDUAL AND GENDER

Dependent variable:	Urban			Rural		
	(1)	(2)	(3)	(1)	(2)	(3)
Wealth						
gender	-59091.47 (41793.64)	-35805.04 (39913.77)	4087.606 (3372.005)	-23392.83 (16934.34)	-24310.29 (16102.85)	-21825.91 (15782.19)
fincome		9.350039*** (0.4216848)	0.0523358 (0.0372919)		4.179863*** (0.2088528)	3.574825*** (0.2121643)
county fixed effects	N	N	Y	N	N	Y

  

Dependent variable:Residual	Urban			Rural		
	(1)	(2)	(3)	(1)	(2)	(3)
gender	4808.171 (15041.76)	14768.74 (15344.78)	-263.7662 (15198.16)	9623.1* (5135.497)	10319.35* (5313.681)	9585.218** (4840.649)
fincome		1.349607*** (0.1585021)	0.0050782 (0.1668885)		0.2209307*** (0.0691293)	-0.0770097 (0.0652068)
county fixed effects	N	N	Y	N	N	Y

In the lower part of Table II, the regression object shifts to the residential value. As mentioned in the data part, property plays an important role in the Chinese perception of wealth, often making up the largest share of a family’s assets. And due to its fixed characteristic, a house is often inherited to children, so the residential value can offer a glimpse into a family’s wealth allocation. In the first column (1) of the second urban table, there is no significant relationship between gender and residential value, as the p-value corresponded to gender is greater than 0.1.

Furthermore, in the second column (2) right after that, a strong link can be found between household income and current house values, however, again, there is no evidence of a significant relationship between gender and residential value. In the following third column (3) of the second urban table, after including the county fixed effects variable, gender still has no obvious effect on residential value.

However, in rural areas, the correlation between gender and residential value becomes pronounced. In the first column (1) of the rural table, the p-value of gender is smaller than 0.1 while larger than 0.05, which indicates that there is a correlation between gender and current house value. Besides, the coefficient of gender shows that the sex difference will lead to a 9623.1CNY difference of wealth. In the second column (2) of the rural table, similarly, the correlation remains after family income was taken into accounts, with the gender difference leading to a 10319.35CNY difference of wealth, which widened the difference when family income was not included. Moreover, the introduction of the county fixed effects variable has strengthened the correlation between gender and residential value. In the third column (3) of the rural table, the p-value of gender is smaller than 0.05 and larger than 0.01, suggesting a relatively significant relationship between gender and residential value, and the gender difference will result in a 9585.218CNY difference in wealth.

In conclusion, the first two tables show a regressive relationship of wealth and residential value towards gender in urban and rural areas, and based on gender, two control variables were added successively: family income and county fixed effects. We find that in both urban and rural areas, gender has little impact on wealth, and there is no direct evidence showing a correlation between gender and wealth. In addition, in cities, there is no clear correlation between gender and residential value. However, in rural areas, a significant correlation between these two can be witnessed, and the relationship strengthened with the addition of control variables.

Further, a robustness check was applied to examine the ‘robust’ level of the obtained regression coefficient and estimate the behavior of coefficient when regression is modified, such as adding or removing variables [23]. Therefore, in the following Table III, wealth and residential value are replaced by log (wealth) and log (residual) respectively. Though observing the table of gender and log (wealth), we find no direct evidence for a relationship between the two in either urban or rural areas, since the p values of gender are all greater than 0.1. However, when studying the relationship between gender and log (residual), we found that in urban areas, there is no significant correlation between gender and log (residual), while in rural

areas, the correlation between the two is very significant, both before and after the control variables are included. In the first column (1) of the last rural table, the sex difference is leading to a 68.859% of the difference in wealth, while after including family income and county fixed effects variables, the differences increase to 84.124% and 83.981% respectively.

TABLE III: ROBUSTNESS CHECK

	Urban			Rural		
Dependent variable:						
log(Wealth)	(1)	(2)	(3)	(1)	(2)	(3)
gender	-0.0384596 (0.0729435)	0.0127255 (0.0707542)	-0.0265072 (0.0695786)	0.0051232 (0.047026)	0.0100893 (0.0455163)	-0.0112052 (0.0435608)
fincome		0.0000144*** (7.47E-07)	0.0000111*** (7.68E-07)		0.0000102*** (5.89E-07)	7.94E-06*** (5.48E-07)
county fixed effects	N	N	Y	N	N	Y
	Urban			Rural		
Dependent variable:						
log(Wealth)	(1)	(2)	(3)	(1)	(2)	(3)
gender	-0.0119442 (0.234193)	0.1339256 (0.239791)	0.0763111 (0.2481669)	0.6885968*** (0.1978018)	0.8412411*** (0.2002534)	0.839815*** (0.1983877)
fincome		5.00E-06** (2.48E-06)	-4.43E-07 (2.73E-06)		-8.17E-06*** (2.61E-06)	0.0000124*** (2.67E-06)
county fixed effects	N	N	Y	N	N	Y

Based on the conjecture of the effect of parents’ education level on household wealth allocation, we conduct a further regression analysis of wealth regarding the father’s education level of females and the mother’s education level of females respectively. Similarly, urban and rural areas were analyzed separately in the Table IV and the Table V below. As shown in the following tables, considering the effect of parents’ education level on household wealth allocation, two extra control variables, father’s year of education and mother’s years of education, were added on the basis of family income and county fixed effects. A review of the literature of Shaffer & Oguz [21] suggests that the more educated the mother, the less sexism in the family, but it is not as shown in the tables below.

Regarding the first three urban columns of Table IV, no significant relationship is found between parents’, particularly the father’s education and gender discrimination in the family. However, in the next three rural columns, there is a negative relationship between the educated level of father’s and the gender inequality in wealth allocation with families, with the coefficient number of 15895.23 showing that for every year that the father’s education level increases, the daughter’s share of wealth increase by 15895.23CNY. This finding, contrary to the previous speculation, suggests an intriguing result, that is, men are not simply enjoying the gender dividend but seeking to change the status quo of gender inequality. In Table V, similarly, in cities, parental educational level, especially the mothers’, doesn’t have a significant influence on wealth allocation between different gender children in families. However, in rural areas, the results are equally striking. The more educated the mothers are, the severer the influence of gender on wealth distribution in the family. In summary, from an urban perspective, parents' education level has little effect on the distribution of wealth between the sexes in the family. Whereas, in rural areas, highly educated fathers play a greater role in fairness within the family than mothers, and highly educated mothers even have the opposite effect. This result is contrary to the conventional expectation that groups who have been unfairly treated will show compassion and hands to their fellows, while the mothers, who were in the same predicament, don’t fully realize the value of their daughters’ rescue.

TABLE IV: REGRESSION BETWEEN WEALTH AND FATHER’S EDUCATION OF FEMALE

Dependent variable:	Urban			Rural		
	(1)	(2)	(3)	(1)	(2)	(3)
Female*fatheredu	956.7048 (14352.13)	3588.404 (13104.24)	5354.734 (12388.41)	13639.57 (9495.923)	12522.53 (7636.207)	15895.23* (8432.615)
Gender	-1103.783 (143049.2)	34513.1 (130886.6)	33609.63 (121696)	60005.14 (73824.85)	55838.99 (58802.12)	84809.68 (66922.71)
Feduy	20963.63** (10679.92)	7112.896 (9834.456)	5413.311 (9090.704)	3352.818 (6319.514)	-7500.2 (5123.888)	-9589.405* (5590.746)
Meduy	17072.42** (8086.055)	4073.976 (7493.994)	-348.9522 (7437.875)	14927.57*** (4845.573)	6478.422 (3943.11)	6759.211 (4738.356)
fincome		7.721561*** (0.6094546)	4.668873*** (0.5953644)		10.3969*** (0.5264719)	11.68489*** (0.5942984)
county fixed effects	N	N	Y	N	N	Y

TABLE V: REGRESSION BETWEEN WEALTH AND MOTHER’S EDUCATION OF FEMALE

Dependent variable:	Urban			Rural		
	(1)	(2)	(3)	(1)	(2)	(3)
Female*motheredu	-4427.003 (13348.24)	-12501.78 (12199.3)	-9086.13 (11198.49)	9659.121 (9350.81)	6941.46 (7555.344)	11597.94 (8176.73)
Gender	-46168.85 (125246.1)	-101209.8 (114903.1)	-88149.44 (105663.1)	12933.35 (57007.87)	4933.476 (45885.04)	29294.43 (50654.86)
Feduy	21617.56** (8892.327)	9234.598 (8190.544)	8000.166 (7539.862)	9083.624* (4956.131)	-2250.421 (4043.882)	-3248.647 (4517.053)
Meduy	18650.32** (9358.381)	8515.263 (8629.384)	3271.24 (8564.309)	10897.25* (6105.113)	3560.773 (4922.188)	2260.19 (5630.077)
fincome		7.74799*** (0.6095555)	4.690204*** (0.5955815)		10.39526*** (0.527386)	11.69935*** (0.5951866)
county fixed effects	N	N	Y	N	N	Y

V. CONCLUSION AND DISCUSSION

In summary, review the summary statistics, we found that the wealth, net wealth and residential values of the urban families with girls are higher than the urban families with boys, which may indicate that the former is more affluent and the economic expenditure and pressure of the families of girls are relatively less. Fong, V. L. [24] believes that urban girls have benefited from the one-child policy. While obtaining financial support that was difficult to gain in the past patriarchal family pattern, urban daughters are also striving to rebel against adverse gender norms, while exploring their advantages under ambiguous gender norms. However, the higher value of other house value of boy’s family suggests that the families with boys will prepare the property for their marriage, investing to boost their marital competitiveness, and this also explains the lower wealth accumulation of boys' families. In rural areas, there is clear gender inequality in all the data, with every item of boy’s families higher than girl’s families. This indicates that families with boys are more likely than those with girls, both in terms of income and consumption, either by consuming more money in boys or by working harder to obtain more income to support boys’ education and marriage. Unlike urban, there is little difference in other house values between boy’s families and girl’s families in rural. This may be because most rural families don’t have enough finance to buy a second property, and sons are likely to stay in their existing homes after marriage and families tend to renovate or rebuild their houses to increase their value.

Reviewing the results of the regression, there is no significant correlation between gender and wealth, whether in urban or rural areas, even for the current house value, gender in urban families has no significant influence on it. So we have no direct evidence of a cause-and-effect relationship between the sex of a child and the wealth his family owns. This shows that at the present stage, families will not have large fluctuations in consumption and income due to the gender of their children, both in cities and rural areas, further implying that the wealth allocation among children of

different genders is relatively equitable on the whole, and the gender relations within the families tends to be healthy. However, gender differences are still evident in rural areas to some extent, especially in residential values, with both the second and the fourth table proving that. This illustrates that in rural families’ perspectives, housing value remains an important indicator of family wealth and is mainly prepared for boys, primarily as an imperative advantage in improving son’s competitiveness in the marriage market.

Based on the existing research on gender issues in China, this paper further explores the status of wealth distribution within households from the perspective of applied economics. Although several studies have shown that investment and consumption within families are biased in favor of boys’ education and economic investment, there is no direct evidence found that boys receive a larger proportion of wealth or that families accumulate more wealth as a result of having boys. By contrast, daughters in urban cities reap the benefits because of their only child status and since there is less economic pressure on the girls’ families, that is, no specific cultural context that restricts a girl from providing a home for marriage as boys. In this case, urban and even rural daughters enjoy more education and economic support from their families than boys. Yet even gender discrimination has been mitigated in the allocation of household wealth, social norms and consensus formed over a long period of time still restrict and affect the family’s investment in real estate. Both the results from summary statistics and the findings after regression, the other housing values of boys’ families are higher than those of girls’ families, and the family income is also higher than that of girls, because they give birth to and raise boys. The behavior of increasing the value (dwelling area) of existing houses and the purchase of other houses are stronger linked to the sex of children in rural areas, demonstrating that rural areas are more constrained by traditional notions of marriage and gender. While the son’s housing bonus is ostensibly indicative of his gender advantage, social and economic pressures are also exerted on him and his family. Unhealthy gender stereotypes and attitudes help a boy gain property support while eroding his family’s vitality.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Tianqing Zheng conducted the research; Tianqing Zheng, Kaiyun Wang and Jiake Xie analyzed the data together; Tianqing Zheng wrote the paper; Kaiyun Wang and Jiake Xie gave their opinions according to the article; all authors had approved the final version.

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