Bargaining Power within Couples and Support for Parents on Both Sides

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Abstract

This paper provides a new view on intergenerational transfer and household decision-making by revealing the impact of intra household bargaining on the decision of supporting parents. Using 2011 China Health and Retirement Longitudinal Survey (CHARLS) baseline data, families living together with at least one parent alive for each are chosen as our target samples. Bargaining power of husband and wife is measured by education and first Hukou type, and the support for parents is measured by contact. OLS and Probit regression are used to determine whether bargaining power influences the contact with one's own parents and in-laws. The results show that the probability of living with husband's parent and the ratio of visiting frequency of husband's parent are mainly positively associated with the education gap between husband and wife, while Hukou gap has negative correlation with these contacts.

I. Introduction

How to support elderly parents has always been an important decision for middle-aged couples in China. Major studies mainly discuss the supporting behavior while the process of decision-making and the main contributory factor remained unexplored. This paper makes an attempt in revealing the impact of conjugal bargaining power on the upstream supporting behavior.

As a result of resource constraint, it is common for an unbalanced distribution of supporting resource between husband's parent and wife's parent, which is also proved by our study. Existing studies on supporting parents take parents of both sides as a unit. In this way we are not able define the resource allocation between one's own parent and in-laws that reflects the impact of individual bargaining power. So in this paper we split the support to husband's parent from wife's parent and introduce the intra household bargaining framework.0

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In the literature discussing intra household bargaining process, two main hypotheses are projected in description of the objective function of a household: the unitary utility and the collective utility. The unitary hypothesis assumes that households' preferences can be characterized by a unique utility function as the members are considered as a unit. The collective approach assumes households' utility function to be a weighted sum of the utilities of each member and the weight depends on individual's bargaining power. Marilyn Manser and Murray Brown (1980) proposed the Dictatorial Model, illuminating that if an individual has dictatorial power to determine the gains each partner obtains from the union, then the dictator's strategy is to offer the others just sufficient gain for them to accept. The collective hypothesis gains great popularity in early 1990s and has been applied in modeling intra household dynamics (Beegle et al. 2001; Thomas et al. 2002; Bittman et al. 2003; Friedberg et al. 2005). So this paper will try to figure out which hypothesis applies to the upstream support decision.

The literature on intergenerational support contains studies focusing on ADL or IADL assistance, frequency of contact and financial assistance (Silverstein, Parrott and Bengtson, 1995; White-Means and Rubin, 2008) in upstream support. As we mainly discuss the contact between parents and adult children, which will be measured by whether living together and the frequency of visit in this paper. Studies on the factors predispose adult children to provide support to parents has a rich coverage. Gender of children has always been a main focus. Silverstein, Parrott and Bengtson (1995) believe that son and daughter have no significant difference in supporting their parents. While later Silverstein, Gans and Yang (2006) claim that daughter can give the parents more support for parents tend to expect more from daughter than son in taking care of them. For the study of the number of children, White-Means, Rubin (2008) found no significant effect on the choice of supporting. This paper will also check the consistency later. As for the parents needs, White-Means, Rubin (2008) and Willson, Shuey, Elder (2003) come to similar conclusions that parental needs of supporting has a strong impact on the children's behavior. Willson, Shuey, Elder (2003) emphasized that the parents' health status plays a decisive role in children's choice. White-Means, Rubin (2008) grouped parental needs by memory decrease and how long they can be left alone, and found that those parents who cannot be left alone for one hour require more ADL care and economic support. Due to the limitation of the data, health status of parents will be used to reflect their needs on supporting. This paper will control the effect of gender, number of siblings and parents' health.

Bargaining power in a household(or status gap)is usually measured by personal income, education level and family background. Leora Friedberg and Anthony Webb (2005) used relative wages as a proxy for the bargaining power to study the difference of leisure and chores. Similarly, Michael Bittman (2003) also selected personal income as a measure of bargaining power to study the impact of the gap on the housework. However, the authors found that the increase in time spending on housework brought about by increasing revenue is neutralized by gender effect. And Kathleen Beegle's measure (2001) of the gap is more detailed, by taking following factors into account to evaluate the spouses status gap: how much couples' assets accounted for the proportion of total household assets, the education gap, whether it is the head of household, variables representing family social status differences and education differences between their fathers. And that

study used the differences of Indonesian women's prenatal care and intrapartum care to reflect the spouses' status gap. When studying about the influence of status gap towards the children's health, Duncan Thomas (2002) selects three factors to evaluate the gap: assets differences brought by marriage, educational level, and one variable representing family background, which is calculated by housing environment, father's working status, parents' education, family income and family assert level. It can be seen that the research about family internal decision-making about spouses' status gap and bargaining power has not reached the field of parent support. Based on the availability and interest of CHARLS data, this paper mainly take the effect of the difference of education and the first Hukou type in to our bargaining analysis. The reason why we add birth account is that under the household registration system with Chinese characteristics, born account is an index that contains rich information about family background and traditional consciousness.

For lack of existing studies focusing on the impact of bargaining power upon supporting decision, this paper fills the gap in this field by providing a new perspective in analyzing the intergenerational support through intra household bargaining power. And we are going to prove which one of the unitary utility or the collective utility hypothesis applies for the supporting situation by examining whether relative power has an effect on support for parents.

Estimation is conducted using data from CHARLS 2011 baseline. (CHARLS is a biennial survey aiming to be representative of residents of China aged 45 and older, and is part of a set of longitudinal aging surveys conducted in the United States, England and some European countries). Bargaining power gap can be measured by the education status gap and Hukou gap at birth. And the paper focuses on contact towards parents, so the proportion of living with parent and visiting frequency are used to measure parent support, while other factors like gender, sibling number, parent's health other irrelevant variables shall be controlled.

The organization of the paper is shown below. Section II describes the data and variables we use and discusses some of their salient features. The econometrical method we use is presented in Section III, and the empirical results are presented and discussed in Section IV. This paper ends on the concluding note of Section V.

II. Data and Descriptive Statistics

The database utilized is the 2011 China Health and Retirement Longitudinal Survey (CHARLS), which was conducted in 28 provinces, 150 countries/districts, 450 villages/urban communities across Mainland China, with a total individual sample size of 17708. The CHARLS sample is the representative of people who is 45 and over and their spouse regardless of age, living in households. All samples were drawn through four stages, randomly selected by Probability Proportional to Size (PPS), as primary sampling units (PSUs) -- then be sampled by interviewers using the mapping software named CHARLS-GIS. CHARLS aims to set up a high quality micro-database that provides a wide range of information about the elderly respondents and their spouses, including demographical background, family information, health status and insurance, work,

retirement, income and expenditure, and house characters. This study mainly exploits data from the first two modules. The advantages for using CHARLS data are the age group of its respondents is relatively high enough for their parents to generate the need for support and its abundance in the information of the respondents' parents and intergenerational transfer.

Since this paper reveals the impact of conjugal status gap on supporting one's own parents and in-laws, our study samples are drawn from married-couple households that husband and wife live together. To balance the opportunity to support parents, we choose couples with at least one parent alive for both of them. And missing values of dependent /explanatory/control variables are deleted or imputed in order to improve the accuracy of regressions (Table1).

This paper focuses on the contact between target couples and their parents. Two dependent variables are used: (1) condition of living with parents; (2) frequency of visiting parents in the past year. Two explanatory variables used to measure the status gap are the education gap and the difference of the Hukou type at birth between husband and wife. For simplicity, we use dummy variable for explanatory variables: 1-husband lower than wife 2- same 3- husband higher than wife. Though personal income gap is widely used in the former study, CHARLS data provides only household income for couples engaged in agriculture, which will lead to great loss in samples once we take income into account. Control variables include the demographical and health information of the parents, sibling numbers and age of the couples and the distance between couples and their parents.

We use weighted data to describe the main variables (total sample of 917). Table2 depicts the distribution of education gap and first Hukou gap in three groups between husband and wife. Households with husband's education level higher than wife(49%) takes a higher proportion than couples have same education level(36.2%) and husband is lower than wife in education level(14.8%). In China, boys tend to receive a higher level of education than girls, especially in rural areas. Most couples have the same type of Hukou at birth(90.8%), and the proportion of households with husband born with an agricultural Hukou and wife with a nonagricultural Hukou is 6.5%; households with husband born with a nonagricultural Hukou while wife has an agricultural Hukou is 2.6%. Hukou belongs to a Chinese way household register system that divide people into urban and agricultural groups and the Hukou type at birth can partially reflect the family background of a person. The description shows that most marriage bases on the equal family background.

The contact between the respondents and their parents is divided into condition of living (Table3) and visiting frequency in the past year (Table4). The condition of living is completely represented by four cases: (1) living with neither the own parents nor the in-laws (2) living with wife's parent only (3) living with husband's parent only (4) living with husband's parent and wife's parent. The rate of living apart from both side of parents (85.2%) is much higher than other cases, and the rate of living with husband's parent (13.2%) is relatively higher among cases of living with parent (living with wife's parent only 1%; living with both 0.6%). The low rate of living with parent can affect the

result of statistic analysis. As the fourth case of living together with all the parents is barely seen in real life, we will omit this case in the later regression. Table4 describes the visit frequency and ratio of visit to husband's parent and wife's parent. In order to get rid of the substitution effect of living together replacing the visiting behavior, we filter out households living with parent (the sample size cut down from 917 to 737). Among the new samples, frequency of visiting husband's parent is significantly higher than visiting wife's parent (the mean frequency of 176 for husband's parent versus 72 for wife's parent). The proportion of visiting husband's parent and wife's parent in a household is 64.6% and 35.4%.

Table5 illustrates the difference in demographical and parental characteristics between husband and wife. Husband is 2 years elder than wife on average (51versus 49), and accepts 2 more years of education than wife (8.9 versus 6.9). Husband's parents normally live in the same neighborhood where the couples live, and wife's parents usually live in the same city. There is no significant difference between the rate of agricultural Hukou at birth, number of siblings, demographical background of parents and the health status of parent.

To provide a more direct image showing the impact of status gap on contact with parents, we produce bar charts to compare the contact with husband's parent to contact with wife's parent. Figure1 and Figure2 show the influence of education gap on the percent of living with parent and visiting frequency. Education gap has a major influence on the rate of living with husband's parent, for the percent of living with husband's parent increases as husband gain more power in education (Fig.1); meanwhile education gap affects the frequency of visiting wife's parent, for the frequency decreases as the bargaining power of wife weakens (Fig.2). Figure3 and Figure4 present the power of Hukou gap over intergenerational contact. Hukou gap has no recognizable impact on the rate of living with both sides of parents. Conversely, the frequency of visiting wife's parent is influenced by Hukou gap--as wife losing bargaining power in Hukou, the frequency of visiting wife's parent falls (Fig.4). Through all these charts we can clearly see that there is disproportion on the distribution of supporting resource between husband's parent and wife's parent.

III. Econometric Approach

The figures suggest some clear links between the gap in education (or first Hukou type) and the maintenance for parents on both sides, but they do not provide a framework for formal statistical inference. Two indicators measure the Support for Parents on Both Sides: the probability of living with husband's parents and the ratio of visiting frequency of husband's parents. Hence two models for household's behaviors are used to estimate the correlations between the indicators and bargaining power.

1. Relative power and the probability of living with husband's parent

The first step of our analysis is to examine the relationship between couple's relative power and the probability of only living with husband's parent, we therefore estimate the following Probit:

(1) $\text{Prob}(Y_i = 1) = \Phi(\beta_1 edu_{i(h=w)} + \beta_2 edu_{i(h>w)} + \beta_3 hukou_{i(h=w)} + \beta_4 hukou_{i(h>w)} + C_i X_i)$

For the i th couple, Y is a binary variable for whether the couple is living with the husband's parent; i.e. $Y_i = 1$ if the i th couple is living with the husband's parent, $Y_i = 0$ otherwise.[2] The education gap is measured by $edu_{i(h=w)}$ and $edu_{i(h>w)}$, and the Hukou gap is measured by $hukou_{i(h=w)}$ and $hukou_{i(h>w)}$. Here we suppose higher education level dominates lower education level, and non-agricultural residence registration dominates agricultural ones. In the equation, $edu_{i(h=w)} = 1$ if the education level of husband equals to that of wife; $edu_{i(h=w)} = 0$, otherwise. $edu_{i(h>w)} = 1$ if the education level of husband is higher than that of wife; $edu_{i(h>w)} = 0$, otherwise. Similarly, $hukou_{i(h=w)} = 1$ if the type of husband's first Hukou is same to wife's; $hukou_{i(h=w)} = 0$ otherwise. $hukou_{i(h>w)} = 1$ if husband's first Hukou is nonagricultural while wife's first Hukou is agricultural, which indicates the husband is more powerful. Otherwise, $hukou_{i(h>w)} = 0$. X_i is a vector of covariates to control for the i th couple's and their parents' characters, which includes husband's age, age gap of husband and wife(husband-wife), husband's years of schooling, husband's type of fist Hukou[3], husband's sibling's number, gap of sibling's number between husband and wife(husband-wife), lager age of husband's parent, larger age of wife's parent, higher years of schooling of husband's parent, higher years of schooling of wife's parent and dummy for imputation of Hukou gap[4]. The gap coefficients β_1 to β_4 are parameters of primary interest, indicating whether the bargaining power from education or Hukou exits within family.

2. Relative power and the ratio of frequency of visiting husband's parent

Another side to examine the existence of bargaining is the estimation of the relationship between couple's relative power and the ratio of visiting frequency of husband's parent. For the i th couple, we can write

(2) $R_i = \gamma_0 + \gamma_1 edu_{i(h<w)} + \gamma_2 edu_{i(h>w)} + \gamma_3 hukou_{i(h<w)} + \gamma_4 hukou_{i(h>w)} + P_i Z_i + \varepsilon_i$

Where R_i is the ratio of frequency of visiting husband's parent; i.e.

$$R_i = \frac{\text{Frequency of visiting husband's parent in the past year}}{\text{Frequency of visiting either parent in the past year}}$$

Z_i is a vector similar to X_i in equation (1). The only difference lies in that parent's residence distance away from children is added in Z_i, which may have significant effect on the visiting frequency. As above, the OLS estimates of γ_1-γ_4 are still of primary interest. It is worth mentioning here that the couples living with either side are deleted from the sample in case of the substitution of living together to visit.

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[2] In case of sample selection, here the reverse of only living with husband's parent includes three conditions: only living with wife's parent, living with parent on both sides, and not living with either side.

[3] The dummy for husband's type of fist Hukou equals to 1 if it is agricultural; otherwise equals to 0.

[4] We imputed the 67 missing values randomly according to the mean of the province and urban/rural group

IV. Estimation result

1. Probit estimate for living conditions

Table 6 reports the results from the Probit estimation of the probability of living with husband's parents. With no control variables, the estimates show a significant correlation between bargaining power in education and the probability of living with husband's parent. On education, there is no significant difference between a balanced family (i.e. husband and wife have the same education level) and a wife dominant family. While a husband dominant family has 5.5% (0.031) greater probability of living with husband's parent than a balanced family. But we do not find significant difference among families with different types of first Hukou. The coefficient of "Hukou gap imputed" shows the imputation for Hukou gap does not disturb the results. Controlling for individual's absolute level of education and type of first Hukou, the probability of living with husband's parent in a husband dominant family becomes even larger with a higher significant level. And the effect of Hukou gap appears. The characters of couples and their parents are added successively in column 3 and column 4. Focusing on the results in column 4, we see that, taken together, a husband dominant family has 7.3% (0.031) greater probability to live with husband's parent than a balanced family. But we cannot find statistically significant greater probability in a balanced family than a wife dominant family.

A husband dominant family in first Hukou type is less likely to live with husband's parent than a wife dominant family. And there is no significant difference between a wife dominant family and a balanced family in first Hukou type. The lack of statistical significance may be due to potential influence of Hukou gap on the behavior of the respondents. People with non-agricultural Hukou may prefer to live apart from parents, while those with agricultural Hukou are more likely to live with their own parent. Ceteris paribus, the increase in husband's years of schooling and sibling's number reduces the probability of living with husband's parent, while the probability positively related to a larger age. Husband with agricultural Hukou is more likely to live with his parent, which confirms the former speculation. Other covariates like parent's education and parent's health status have no effect on the probability of living with husband's parent.

2. OLS estimate for ratio of frequency of visiting husband's parent

Table7 demonstrates the correlation of bargaining power and the ratio of visiting frequency. With no control variables, the estimates show a strong association between bargaining power in education and the probability of living with husband's parent. Similarly, there is no significant difference between a balanced family and a wife dominant family on education. Still, a husband dominant family has 12% (0.026) larger percent of frequency of visiting husband's parent than a balanced family. And the relationship between Hukou gap and ratio of visit frequency seems to be more confusing. The imputation of the Hukou gap has some influence on the estimate. From column (2), the effect of imputation is no longer significant and the results are consistent to the previous Probit estimate. It is noteworthy that column (5) also considers the parent's residence distance away from couple's, which is an important determinates of visit frequency for couple not living with either parent. In column (5), compared with a

balanced family, a husband dominant family in education increases the ratio of frequency of visiting husband's parent by 5% (0.022) .while there is no significant difference between a wife dominant family and a balanced family in education. A wife dominant family in first Hukou type decreases the ratio of frequency of visiting husband's parent by 10% (0.046), while there is no significant difference between a husband dominant family and a balanced family in first Hukou type. Besides, similar findings can be seen in Table7 that there are negative coefficients from regressions of husband's years of schooling, sibling's number and residence distance, while positive from husband's agricultural Hukou.

V.Conclusion

This paper presents the Probit and OLS estimates of the relationship between the bargaining power within couples and their support for parents on both sides. The bargaining power within couple is measured by the difference of education level and type of first Hukou. Our estimation results demonstrate the existence of this relationship and provide empirical evidence for hypothesis of collective utility. Compared with a wife dominant family, a husband dominant family in education is more likely to live with husband's parent or visit his parent. While a husband dominant family in first Hukou is less likely to live with husband's parent or visit his parent, which can be interpreted as a reflection of different living arrangement preference between urban and rural respondents. Furthermore, we find the association with visit frequency is stronger than living arrangement. This may due to the low proportion of living with either parent. Another interesting phenomenon is that the correlation is only significant in the husband dominant family. We cannot find similar results from the comparison between a wife dominant family and a balanced family. We guess in a society like China, men perhaps gain more extra power than women from the social conventions, which may offset the effect of this kind of bargaining. Finally our study serves to highlight the importance of intra household bargaining on the couple's supporting decision making. And the study concentrated on estimating the overall relationship. The exact reason for why the relationship is asymmetric in husband dominant families and wife dominant families will be further studied.

References

Beegle, Kathleen, Elizabeth Frankenberg, and Duncan Thomas. "Bargaining power within couples and use of prenatal and delivery care in Indonesia."*Studies in family planning* 32.2 (2001): 130-146.

Bittman, Michael, et al. "When Does Gender Trump Money? Bargaining and Time in Household Work1." *American Journal of Sociology* 109.1 (2003): 186-214.

Friedberg, Leora, and Anthony Webb. "The chore wars: Household bargaining and leisure time." *Unpublished manuscript. Charlottesville, VA: University of Virginia* (2005).

Manser, Marilyn, and Murray Brown. "Marriage and household decision-making: A bargaining analysis." *International Economic Review* 21.1 (1980): 31-44.

Silverstein, Merril, Daphna Gans, and Frances M. Yang. "Intergenerational Support to Aging Parents The Role of Norms and Needs." *Journal of Family Issues* 27.8 (2006): 1068-1084.

Silverstein, Merril, Tonya M. Parrott, and Vern L. Bengtson. "Factors that predispose middle-aged sons and daughters to provide social support to older parents." *Journal of Marriage and the Family* (1995): 465-475.

Thomas, Duncan, Dante Contreras, and Elizabeth Frankenberg. "Distribution of power within the household and child health." *UCLA, Department of Economics, Mimeo* (2002).

Willson, Andrea E., Kim M. Shuey, and Glen H. Elder. "Ambivalence in the Relationship of Adult Children to Aging Parents and In-Laws." *Journal of Marriage and Family* 65.4 (2003): 1055-1072.

White-Means, Shelley I., and Rose M. Rubin. "Parent caregiving choices of middle-generation blacks and whites in the United States." *Journal of Aging and Health* 20.5 (2008): 560-582.

Appendix

Table1: Respondent Level Sample Restriction

		Deleted	Remained	Used for
0	keep married-couple households		5,871	
1	keep couples living together	466	5,405	
2	keep households with at least one parent alive for both side	4,300	1,105	
3	delete households with missing in whether living together with parents	187	918	
4	delete households with missing in couples' first Hukou gap	(imputed)67	918	
5	delete households with missing in couples' education gap	0	918	
6	delete households with missing in the age of couples	(imputed)64	918	
7	delete households with missing in the couples' number of siblings	1	917	
8	delete households with missing in the age of parents	0	917	
9	delete households with missing in parents' years of schooling	(imputed)23	917	
10	delete households with missing in parents' health status	0	917	Table 2 Table 3 Table 5 Table 6
11	delete households living with parent	133	784	
12	delete households with missing in visiting frequency	7	737	Table 4 Table 7

Data Source: CHARLS 2011 baseline

The missing values of first Hukou gap, respondents' age, parents' year of schooling and the cigarette cost of husband are imputed randomly according to the province and urban/rural group mean for each variable.

For the study on rate of living with parents, we have a sample size of 917; for visiting frequency, we delete households living with parent, then get 737 samples.

Table 2. Education/First Hukou Gap Distribution of CHARLS Respondents (weighted, cluster household)

Variables	Categories	N	proportion
Education Gap	Husband Lower Than Wife	137	0.184
	Same Education Level	306	0.302
	Husband Higher Than Wife	474	0.514
First Hukou Gap	Husband Agri. Wife Non.	48	0.059
	Husband same as Wife	847	0.915
	Husband Non. Wife Agri.	22	0.026

Data Source: CHARLS 2011 baseline

Table 3. Condition of Living With Parent of CHARLS Respondents (weighted, cluster household)

Condition of Living With Parent	N	proportion
Living apart from husband's parent and wife's parent	784	0.852
Living with wife's parent only	8	0.010
Living with husband's parent only	120	0.132
Living with husband's parent and wife's parent	5	0.006

Data Source: CHARLS 2011 baseline

Table 4. Visiting Frequency Without Living With Either Parent of CHARLS Respondents (weighted, cluster household)

Condition of Living With Parent	obs	mean	min	max
Frequency of Visiting Husband's Parent	737	175.582	0	365
Frequency of Visiting Wife's Parent	737	71.838	0	365
Frequency of Visiting Husband's Parent/Frequency of Visiting Either Parent	737	0.646	0	1
Frequency of Visiting Wife's Parent/Frequency of Visiting Either Parent	737	0.354	0	1

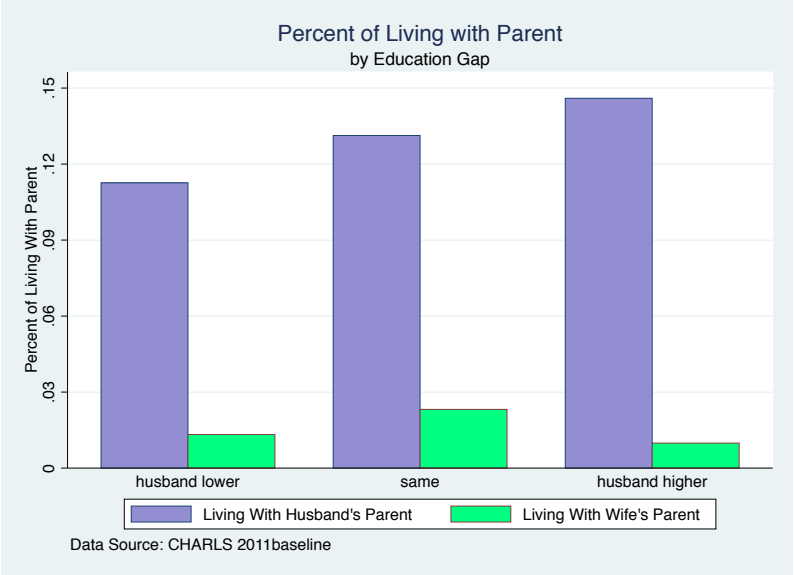
Data Source: CHARLS 2011 baseline

Table 5. Summary Statistics(weighted, cluster household)

Variable	Husband				Wife			
Variable	obs	mean	min	max	obs	mean	min	max
Demographics								
Age	917	51.005	38	71	917	49.288	22	70
First Hukou is agricultural	917	0.744	0	1	890	0.770	0	1
Years of schooling	917	8.871	0	19	917	6.886	0	16
Sibling's number	917	3.760	0	10	917	3.719	0	10
Parent's Information								
The larger age	917	81.264	58	111	917	81.348	51	111
The longer years of schooling	917	3.880	0	12	917	3.710	0	12
Marital status: 0=alone,1=married	917	0.425	0	1	917	0.412	0	1
Both health is good or very good	917	0.203	0	1	917	0.199	0	1
Residence distance away from children	917	2.363	1	5	917	2.930	1	5

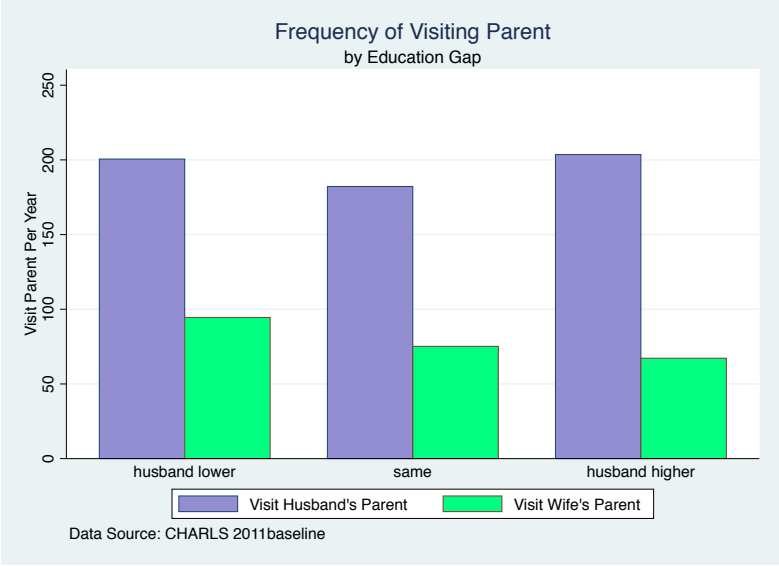
Data Source: CHARLS 2011 baseline

Fig.1 Impact of Education Gap on Percent of living with parents



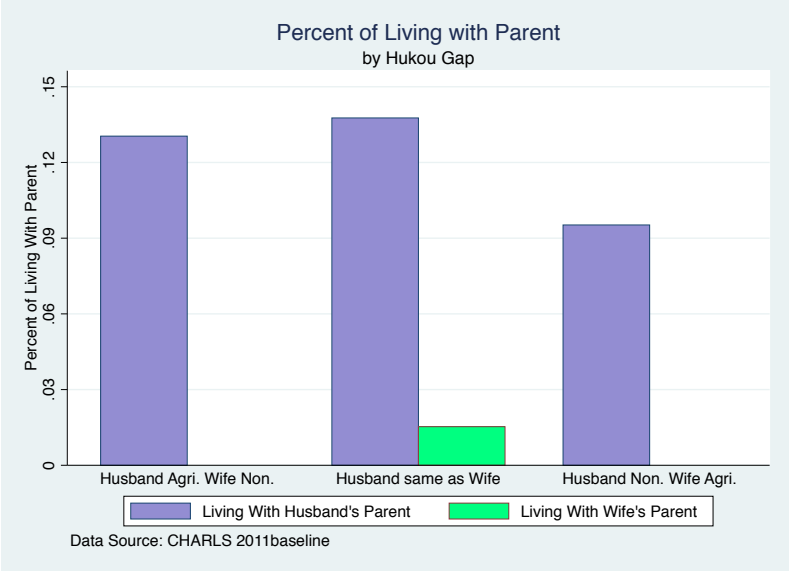
Education gap has a major influence on the rate of living with husband's parent, for the percent of living with husband's parent increases as husband gain more power in education

Fig.2 Impact of Education Gap on Frequency of visiting parent



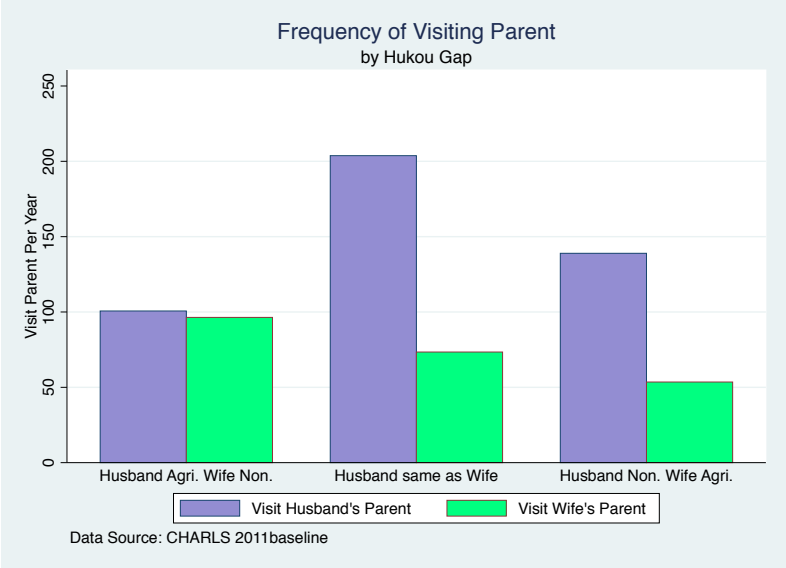
Education gap affects the frequency of visiting wife's parent, for the frequency decreases as the bargaining power of wife weakens

Fig.3 Impact of Hukou Gap on Percent of living with parents



Hukou gap has no recognizable impact on the rate of living with both sides of parents.

Fig.4 Impact of Hukou Gap on Frequency of visiting parent



The frequency of visiting wife's parent is influenced by Hukou gap--as wife losing bargaining power in Hukou, the frequency of visiting wife's parent falls.

Table 6 Probit Results for the Probability of Living With Husband's Parent

VARIABLES	(1)	(2)	(3)	(4)
	dy/dx			
Edu: wife=husband	0.017	0.037	0.035	0.036
	(0.032)	(0.032)	(0.030)	(0.030)
Edu: husband dominant	0.055*	0.064**	0.070**	0.073**
	(0.031)	(0.031)	(0.030)	(0.031)
First Hukou: wife=husband	0.003	-0.119	-0.132	-0.130
	(0.047)	(0.087)	(0.087)	(0.088)
First Hukou: Husband dominant	-0.054	-0.170*	-0.184*	-0.182*
	(0.068)	(0.102)	(0.102)	(0.103)
Hukou gap imputed	-0.023	-0.074	-0.076	-0.077
	(0.041)	(0.049)	(0.047)	(0.047)
Husband's years of schooling		-0.007**	-0.009***	-0.009**
		(0.003)	(0.003)	(0.003)
Husband's first Hukou: Agri.		0.084***	0.081***	0.081***
		(0.030)	(0.030)	(0.031)
Husband's first Hukou imputed		0.129	0.115	0.115
		(0.137)	(0.130)	(0.131)
Husband's age			-0.007***	-0.007***
			(0.002)	(0.003)
Age gap (husband-wife)			0.007**	0.007**
			(0.003)	(0.003)
Husband's sibling's number			-0.033***	-0.033***
			(0.009)	(0.009)
Sibling's number gap (husband-wife)			0.016**	0.016**
			(0.007)	(0.008)
Lager age of husband's parent				-0.000
				(0.001)
Lager age of wife's parent				0.001
				(0.001)
Longer years of schooling of husband's parent				-0.001
				(0.003)
Longer years of schooling of wife's parent				0.001
				(0.003)
Husband's parent:alone; wife's parent:married				0.021
				(0.036)
Husband's parent:married; wife's parent:alone				-0.026
				(0.032)
Husband's parent:alone; wife's parent:alone				0.003
				(0.030)

Husband's parent health is good or very good				0.014
				(0.031)
Wife's parent health is good or very good				-0.014
				(0.030)
Log-likelihood	-353.025	-345.052	-332.451	-331.015
Obeservations	917	917	917	917

Standard errors in parentheses

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

Data Sourse: CHARLS 2011 baseline

A husband dominant family has 7.3% (0.031) greater probability to live with husband's parent than a wife dominant family. But we cannot find statistically significant greater probability in a balanced family than a wife dominant family.

A husband dominant family in first Hukou type is less likely to live with husband's parent than a wife dominant family. And there is no significant difference between a wife dominant family and a balanced family in first Hukou type.

Table 7. OLS Estimate of Ratio of Visiting Frequency Without Living With Either Parent

VARIABLES	(1)	(2)	(3) dy/dx	(4)	(5)
Edu: wife dominant	0.05	0.01	0.02	0.01	0.01
	(0.036)	(0.037)	(0.037)	(0.037)	(0.030)
Edu: husband dominant	0.12***	0.08***	0.08***	0.08***	0.05**
	(0.026)	(0.026)	(0.027)	(0.027)	(0.022)
First Hukou: wife dominant	-0.14***	-0.00	-0.02	-0.03	-0.10**
	(0.049)	(0.055)	(0.055)	(0.056)	(0.046)
First Hukou: Husband dominant	-0.11*	-0.12*	-0.11*	-0.11*	0.02
	(0.063)	(0.062)	(0.063)	(0.063)	(0.052)
Hukou gap imputed	-0.10**	-0.06	-0.05	-0.04	0.04
	(0.048)	(0.071)	(0.071)	(0.071)	(0.058)
Husband's years of schooling		-0.01***	-0.01**	-0.01**	-0.00
		(0.003)	(0.003)	(0.003)	(0.003)
Husband's first Hukou: Agri.		0.16***	0.15***	0.13***	-0.02
		(0.034)	(0.034)	(0.036)	(0.031)
Husband's first Hukou inputed		-0.06	-0.07	-0.06	-0.12*
		(0.087)	(0.087)	(0.087)	(0.071)
Husband's age			-0.00	-0.00*	-0.00
			(0.002)	(0.003)	(0.002)
Age gap (husband-wife)			0.01*	0.01*	0.01**
			(0.003)	(0.004)	(0.003)
Husband's sibling's number			0.01	0.01	0.00
			(0.009)	(0.009)	(0.008)
Sibling's number gap (husband-wife)			-0.01**	-0.01*	-0.01
			(0.007)	(0.007)	(0.006)
Lager age of husband's parent				-0.00	-0.00
				(0.001)	(0.001)
Lager age of wife's parent				0.00*	0.00
				(0.001)	(0.001)
Longer years of schooling of husband's parent				-0.00	-0.00
				(0.003)	(0.003)
Longer years of schooling of wife's parent				-0.00	-0.00
				(0.003)	(0.003)
Husband's parent:alone; wife's parent:married				0.01	-0.00
				(0.036)	(0.029)
Husband's parent:married; wife's parent:alone				-0.04	-0.03

				(0.034)	(0.028)
Husband's parent:alone; wife's parent:alone				0.04	0.03
				(0.030)	(0.025)
Husband's parent health is good or very good				-0.00	-0.01
				(0.029)	(0.024)
Wife's parent health is good or very good				-0.05*	-0.05**
				(0.030)	(0.024)
Husband's parent:same city					-0.30***
					(0.025)
Husband's parent:same province					-0.45***
					(0.045)
Husband's parent: another province					-0.54***
					(0.059)
Wife's parent:same city					0.23***
					(0.021)
Wife's parent:same province					0.34***
					(0.038)
Wife's parent: another province					0.44***
					(0.053)
Constant	0.64***	0.61***	0.70***	0.78***	0.75***
	(0.020)	(0.048)	(0.136)	(0.157)	(0.129)
Observations	737	737	737	737	737
R-squared	0.045	0.101	0.110	0.129	0.427

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Data Sourse: CHARLS 2011 baseline

Compared with a balanced family,
a husband dominant family in education increases the ratio of frequency of visiting husband's parent by 5% (0.022) .while there is no significant difference between a wife dominant family and a balanced family in education.
a wife dominant family in first Hukou type decreases the ratio of frequency of visiting husband's parent by 10% (0.046) .while there is no significant difference between a husband dominant family and a balanced family in first Hukou type.