

BARGAINING POWER & HOUSEHOLD DIVISION OF LABOUR

*Evidence from 2008 China
Time-Use Survey*



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CONTEXT

- It raises the question of whether access to earnings increases women's bargaining power and increases their ability to negotiate for more favorable household resource allocations such as more equal sharing of household work.
- It makes the analysis of time use patterns and the role of bargaining power very important.



SURVEY DESCRIPTION AND SAMPLE

- Our study focuses on a sample of 13,505 married couples, with 7,327 in urban and 6,178 in rural areas, drawn from the 2008 China Time Use Survey (CTUS).
- The survey involved 16,616 households and was administered by in 10 provinces.
- All household members between 15 and 74 years old completed a 24-hour time diary for both a weekday and a weekend day in ten-minute intervals beginning at 4 a.m.
- Each individual also completed a personal questionnaire, which provides information including age, educational attainment, income level and occupation/employment status.



	Husband	(%)	Wife	(%)
Observations	13505		13505	
Average age (year)	47.63		45.70	
Education				
Average education years	8.91		7.69	
No schooling	162	1.2	916	6.8
Primary	1895	14.0	2969	22.0
Junior middle	5022	37.2	4345	32.2
High school (or technical) secondary)	3589	26.6	3140	23.3
College and above	2837	21.1	2135	15.8
Monthly personal income (RMB Yuan)				
Average wage rate (RMB Yuan/hour)	0.50		0.32	
No income	545	4.0	1954	14.5
Less than 500	2140	15.8	3272	24.2
500-1000	3706	27.4	3829	28.4
1000-2000	4321	32.0	3105	23.0
2000-5000	2498	18.5	1268	9.4
5000-10000	258	1.9	68	0.5
More than 10000	37	0.3	9	0.1
Occupation				
Employed	11375	84.2	9665	71.6
Unemployed	262	1.9	383	2.8
Retired	1369	10.1	1783	13.2
Student	2	0.0	3	0.0
Housewives (husbands)	51	0.4	1149	8.5

SURVEY DESCRIPTION AND SAMPLE

- Husband's education (8.9 years) is higher than wife (7.7 years), and so does monthly wage.
- Compared to their husbands (15.8%) a greater proportion of wives (28.4%) are either unemployed or not in the labor force.

	Husband		Wife	
	Participation Rate	Average Time Conditional on Participation	Participation Rate	Average Time Conditional on Participation
Labor Market Work^a	84.74	500.59	72.84	430.29
Paid employment	57.56	458.76	41.21	424.93
Household production, primary industry	30.45	411.77	31.98	371.57
Household production, manufacturing	3.44	410.60	2.22	296.32
Household services generating income	5.60	368.17	3.98	323.82
Household and Care Work	67.81	126.48	96.67	246.55
Household work ^b	61.89	104.32	95.69	194.28
Caring for members and others in community ^c	21.52	98.59	31.54	132.49
Non-Work	100	930.03	100	888.28
Studying	1.49	149.65	1.57	163.57
Leisure ^d	96.19	244.50	94.29	215.56
Sleep/Personal care	100	692.62	100	681.78
Total Work	98.34	520.26	99.43	555.68

SURVEY DESCRIPTION AND SAMPLE

- Wives engage in labor market activities to a lesser extent than husbands, both in terms of participation rate and the average time spent.
- Wives engage in Household and Care Work to a bigger extent than husbands, both in terms of participation rate and the average time spent.

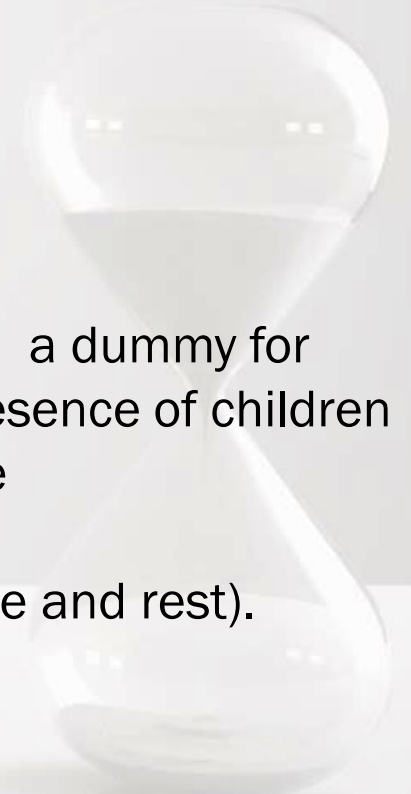
EMPIRICAL MODEL

Using the SUR approach to analyze the amount of time that a person i allocates to performing each main activity category j .

$$Y_{ji} = \beta_{ji0} + X_{ji1}\beta_{ji1} + X_{ji\gamma}\beta_{ji\gamma} + u_{ji}$$

$$\sum Y_j = 1440 \text{ and } \sum \beta_{ji\gamma} = 0 \text{ for all } \gamma = 1, 2, \dots, n$$

- Y represents minutes per day
- $X1$ represents the main explanatory variables, bargaining power proxies
- $X2$ represents the set of control variables, including a region dummy (urban or rural), a dummy for whether the person is employed, and household composition variables particularly presence of children 0-6 years and 15 to 17 years as well as the number of older persons at retirement age
- γ is the index for explanatory and control variables
- $j = 1, 2, 3$ representing market work, household work, and non-work (primarily leisure and rest).



EMPIRICAL MODEL

- Consider two alternate proxies for bargaining power.
- Model 1, Bargaining power is proxied by an estimated hourly wage and a dummy indicating whether the person earns a higher wage than his or her spouse.
- Model 2, Bargaining power is proxied by the education gap and age gap between marriage partners, include education gap-squared and age gap-squared.



RESULTS

- For both wives and husbands, having higher wage earnings is associated with more time spent on housework and less time spent on market work.
- The age gap proxy positively impacts husband's market work time and wives' household work time.
- The education gap bargaining proxy for husbands indicates less household work and more market work time.

	Model 1 (with Bargaining Power Proxy 1) ^a				Model 2 (with Bargaining Power Proxy 2) ^a			
	Husband		Wife		Husband		Wife	
	Housework Time	Market work time	Housework Time	Market work time	Housework Time	Market work time	Housework Time	Market work time
Constant	175.4*** (18.480)	71.33** (31.730)	304.1*** (23.950)	-22.270 (31.030)	176.7*** (18.740)	68.62** (32.380)	313.4*** (24.320)	-22.530 (31.820)
Estimated hourly wage	0.197*** (0.030)	-0.745*** (0.051)	0.343*** (0.063)	-0.932*** (0.081)				
Higher relative income^b	-26.03*** (2.022)	54.78*** (3.476)	-28.01*** (2.932)	67.26*** (3.798)				
Age gap^c					-0.160 (0.341)	1.148* (0.590)	1.396*** (0.451)	-0.375 (0.589)
Age gap sq.					0.032 (0.025)	0.027 (0.044)	0.010 (0.034)	0.038 (0.044)
Educ. gap^c					-2.738** (1.324)	5.769** (2.290)	-0.303 (1.777)	5.136** (2.325)
Educ. gap sq.					1.113* (0.615)	-0.148 (1.063)	-1.009 (0.825)	1.726 (1.079)
Has child 0 to 6	30.54*** (2.423)	-17.62*** (4.159)	89.11*** (3.274)	-57.19*** (4.241)	29.82*** (2.442)	-17.09*** (4.220)	89.33*** (3.287)	-57.90*** (4.300)
Kids 15-17 yrs^e	3.176 (3.430)	-1.014 (5.888)	-3.653 (4.621)	8.173 (5.986)	2.644 (3.456)	-0.240 (5.970)	-3.570 (4.638)	7.213 (6.068)
Retired(elderly)^e	-3.610	6.699	-24.20***	16.47***	-3.077	5.347	-23.91***	15.66**

	Model 1 (with Bargaining Power Proxy 1) ^a				Model 2 (Bargaining Power Proxy 2) ^a			
	Husband		Wife		Husband		Wife	
	Housework share	Market work share	Housework share	Market work share	Housework share	Market work share	Housework share	Market work share
Constant	0.396*** (0.043)	-0.0762* (0.045)	0.669*** (0.043)	-0.011 (0.037)	0.396*** (0.043)	-0.054 (0.045)	0.687*** (0.043)	-0.047 (0.038)
Estimated hrly wage	0.003 (0.004)	0.046*** (0.004)	0.007 (0.007)	0.060*** (0.006)				
Higher relative income	0.026*** (0.005)	-0.002 (0.005)	0.010** (0.005)	-0.073*** (0.004)				
Age gap					0.002*** (0.001)	-0.003*** (0.001)	0.004*** (0.001)	-0.003*** (0.001)
Age gap sq.					0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Educ. gap					-0.017*** (0.003)	0.026*** (0.003)	-0.008** (0.003)	0.007*** (0.003)
Educ. gap sq.					0.003** (0.001)	-0.001 (0.001)	-0.003** (0.001)	0.003** (0.001)
Has child 0-6	-0.004 (0.006)	0.057*** (0.006)	0.000 (0.006)	-0.036*** (0.005)	-0.003 (0.006)	0.056*** (0.006)	0.000 (0.006)	-0.038*** (0.005)
Kids 15-17 yrs	0.002 (0.008)	-0.012 (0.008)	-0.004 (0.008)	0.010 (0.007)	0.003 (0.008)	-0.015* (0.008)	-0.006 (0.008)	0.014** (0.007)
Retired (elderly)	-0.003 (0.008)	-0.024*** (0.008)	-0.030*** (0.008)	0.002 (0.007)	-0.004 (0.008)	-0.024*** (0.008)	-0.030*** (0.008)	0.001 (0.007)

RESULTS

- A greater age gap leads to an increase in husband and wife's share of household work.
- A larger education gap, indicating husband's greater bargaining power, results in the husband's smaller share of household work and the effect grows at an increasing rate. However, it has a negative effect on wives' share of household work.

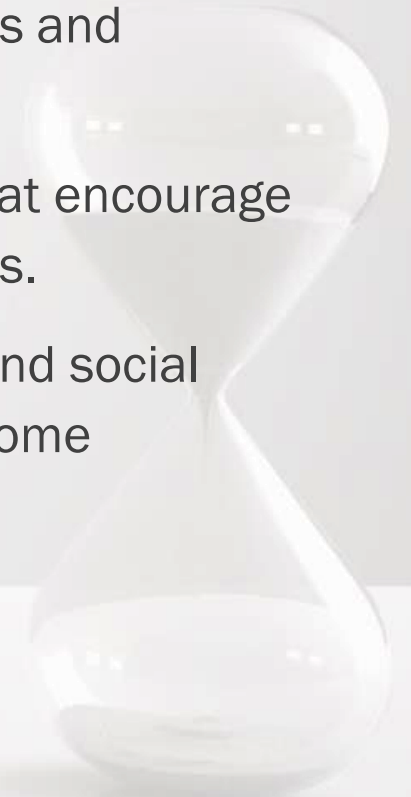
KEY RESULTS PERTAINING TO TIME-USE PATTERNS

- Wives spend on average about 120 minutes more than their husbands in doing household and care work. Overall, wives spend more time on total work (556 minutes per day) than their husbands (520 minutes).
- Having young children increases the time spent in housework for both spouses, but the wife's housework increases considerably more than her husband's (89.3 minutes vs. 29.8 minutes).
- The presence of older, retired household members reduces the wife's housework and increases her market work, indicating their support in domestic chores performed by women.



INSIGHTS FOR POLICY RECOMMENDATIONS

- State provisioning of affordable childcare, early childhood development programmes and support for afterschool care programmes for school-aged children.
- Provide incentives such as paid parental leave and family-friendly labour policies that encourage men to take on household work and spend time caring for their children and parents.
- Cash transfers in the form of child or older person support grants, tax exemptions and social insurance programmes for health, disability and pensions especially among low income households. (The City of Panzhihua in China's Sichuan province)



THANK YOU

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