HUSBANDS, WIVES, AND HOUSEWORK: GRADUATES OF STANFORD AND TOKYO UNIVERSITIES

Myra H. Strober

Agnes Miling Kaneko Chan

ABSTRACT

Barbara Bergmann argues that economic gender equity requires equity not only in paid employment, but also in household work. We examine the household task arrangements of a sample of married 1981 graduates of Stanford and Tokyo (Todai) Universities, about a decade after their graduation. No less than 43 percent of Stanford graduates shared household tasks about equally with their spouse, a much higher sharing rate than for the whole U.S. population. However, only 12 percent of Todai women and 8 percent of Todai men had egalitarian household task arrangements, a sharing rate about equal to that of the whole Japanese population. Holding other variables constant, Stanford men who did at least half of household tasks paid an earnings penalty of about 10 percent. Women who did more than half of household tasks did not pay an earnings penalty. Our examination of task arrangements among dual-career couples provides support for bargaining power theories of the division of household tasks, but suggests that societal ideology plays a critical role in defining the scope for bargaining.

KEYWORDS

Economics of gender, household tasks, egalitarian task arrangements, bargaining power, gender ideology, social norms

One way to achieve equity between the sexes – very possibly the only way – would be for women and men to take similar economic roles. By social custom husbands and wives would do the same amount of family-care work and devote the same time and energy to paid employment. The data we have on labor-force participation and time use shows that wives are moving in that direction; they are spending more time in employment and doing less housework. However, husbands are not meeting them halfway.

Barbara R. Bergmann, *The Economic Emergence of Women* (1986: 266)

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INTRODUCTION

As Bergmann pointed out more than a decade ago, for those who see sharing as crucial to gender equality, data on the sharing of household tasks among husbands and wives in the U.S. provides few bright spots; nationwide studies carried out in the U.S. since Bergmann's book show continued inequality in the sharing of housework by married couples.

Using the 1986 Panel of Income Dynamics Study, Joni Hersch (1991a: 758) found that in the U.S., the number of hours spent on housework by married women with and without children was double that spent by married men with and without children. In 1992, the Families and Work Institute carried out phone interviews with a randomly selected national sample of women and men 18 to 64; in response to a question about who takes major responsibility for a series of household tasks (I do, spouse does, we share 50/50, other), few men or women reported sharing tasks 50/50. Among men living with a spouse or partner, equal sharing was reported by only 19 percent for cooking, 21 percent for cleaning, 30 percent for shopping, and 17 percent for bill-paying. Among women living with an employed husband or partner, equal sharing was reported by only 5 percent for cooking, 10 percent for cleaning, 11 percent for shopping, and 19 percent for paying bills.[1]

In Japan, there is even less equal sharing of household tasks. A 1982 survey of women's lives in six countries carried out by the Japanese Prime Minister's Office (1984) showed that the rate of sharing was lower among Japanese couples than for those in any of the five other countries studied (the Philippines, Sweden, the United Kingdom, the United States, and West Germany). In 90 percent of Japanese families, it was primarily the wife that performed household tasks. Moreover, while in these other countries sharing rates were higher among young people, in Japan, the opposite was true.[2] The 1987 Sino-Japanese Working Women's Family Life Survey also found very low rates of egalitarian sharing of household tasks. This survey of full-time employed married mothers whose children were below school age and attending a child care facility, found that equal sharing was reported by only 7 percent of mothers for cleaning the house, 5 percent for washing clothes, and 3 percent for cooking (Norman Stockman, Norman Bonney, and Sheng Xuewen 1995: 107).

The U.S. literature suggests that more highly educated couples share housework more equally (Sampson Blair and Daniel Lichter 1991; Frances Goldscheider and Linda Waite 1991; Harriet Presser 1994; Catherine Ross 1987; Scott South and Glenna Spitze 1994).[3] On the other hand, Blair and Lichter (1991) found that even those women and men with sixteen or more years of education still had a highly segregated task division at home.

To examine more carefully the patterns and determinants of sharing housework among highly educated women and men and the effect of

sharing housework on hours of employment and earnings, this paper looks at the married graduates of the Classes of 1981 from Stanford University and Tokyo University (Todai), both of whom we surveyed about a decade after their graduation, when they were in their early 30s.[4] Stanford is one of several of the "top" U.S. universities. In Japan, Todai is in a class by itself, unrivaled for prestige, academic rigor, and selectivity (Yoshio Higuchi 1995). Moreover, the women who graduated from Todai in the early 1980s were at the vanguard of social change; they comprised only 6 percent of the Todai graduates in 1981.

This paper seeks to answer four questions: (1) Do the married Stanford and Todai graduates have more egalitarian household task arrangements than other American and Japanese married couples? (2) How satisfied were the graduates with their household task arrangements? (3) In two-earner families, what is the relationship between earnings, relative earnings, and hours of employment on the one hand and the division of household tasks on the other hand? (4) For all married graduates, how are hours of employment and earnings related to having an egalitarian, as opposed to a traditional division of housework tasks?

THEORETICAL PERSPECTIVES

The division of household tasks

Economists and sociologists both approach the gender division of household work through the lens of bargaining power theory (sometimes termed resource theory), arguing that the division of household work depends on the relative bargaining power of the spouses, and that bargaining power stems from having resources (Gary Becker, Elisabeth Landes, and Robert Michael 1977; Paula England and George Farkas 1986; Goldscheider and Waite 1991; Hersch 1991a; Presser 1994; South and Spitze 1994).[5] In addition, these sociologists and some economists (Bina Agarwal 1994, 1997) have stressed the importance of ideology or social norms in the division of household labor. Availability, as measured by the inverse of hours of paid work, is also often considered consequential (Presser 1994).

Bargaining power theory proposes that the higher a wife's earnings, the greater her bargaining power. Earnings are a measure of both economic resources and economic need; the higher her earnings (either absolutely or relative to those of her husband), the more power she has in the marriage. Not only do her earnings bring in economic resources, they also reduce her economic fear about the possibility of the marriage ending, thereby giving her the ability to drive a tougher bargain concerning housework tasks. Similarly, the higher the husband's earnings (either absolutely or relative to his wife's earnings), the more bargaining power he has.

In addition to economic resources and needs, marriage partners bring

personal resources and needs to the bargaining table. Such factors as relative degree of spousal affection and assessments of relative attraction to other potential partners are also likely to affect bargaining power in a marriage. Moreover, perceived career importance and self-image (descriptions of oneself as autonomous, dominant, and achievement-oriented as compared to nurturant and affiliative) have been found to be important determinants of bargaining power and the distribution of household work (Janice Steil and Karen Weltman 1991).

In general, theorists assume that most spouses consider household management and tasks as chores, as they are often termed. Thus, each partner will bargain to do less in the way of household tasks and seek to get the other spouse to do more. Of course, this assumption is not always correct. Some people like certain tasks and even if they had enormous bargaining power, they might still prefer to do them (although not necessarily all the time). Indeed, in our own work on the Stanford and Todai graduates we found that mothers who are employed full-time are not interested in bargaining away any additional child care. In addition, for some people, issues of identity, self-worth, and the pleasures of care-giving (see Myra Marx Ferree 1991) may be tied to successfully performing certain tasks. On the "darker" side, for some women, being the parent in charge of the home may permit greater exercise of power over their children and over their husbands' access or relationship to those children. Also, Arlie Hochschild (1991: 221) has argued that, ironically, the need to rebalance power in a family may sometimes outweigh a wife's bargaining power. For example, husbands who earn less than their wives may seek to rebalance power by doing less in the way of household tasks, or wives may seek to do more. Nonetheless, the assumption that most people, most of the time, seek to use their bargaining power to do fewer tasks seems reasonable.

Ideology about sharing is also a key factor in determining the division of household labor. Two types of ideology need to be considered. The first, societal-level ideology, is closely associated with the concept of social norms. As Agarwal (1994, 1997) has argued, societal-level ideology about gender determines the acceptable scope of bargaining and what must remain in the realm of uncontested tradition.

The second type of ideology of interest is that at the individual or couple level. For in periods when societal-level ideology is undergoing change, the belief systems and desires of individuals and couples will vary considerably, with some continuing to hold on to the old social norms while others more rapidly assimilate emerging new norms. In such times, more sharing is likely to take place when both partners have an egalitarian gender ideology and both think that an egalitarian division of household tasks is important to achieve. Similarly, one spouse or the other may seek to drive a harder bargain about sharing if he or she has a strong ideological position about it.

In Japan, at the societal level, the ideology of sharing housework has been much less discussed and popularized than in the U.S. and the scope for bargaining about a more egalitarian distribution of housework is narrower than in the U.S. Moreover, relatively few women and men appear to be taking advantage of the slowly emerging new norms by developing a personal or couple ideology in which egalitarian household arrangements are a high priority. Thus, although women's increased employment and earnings may have raised their bargaining power vis-à-vis their husbands, it is not clear that Japanese women seek to use this increased power or are successful in using it to attain a more egalitarian distribution of household labor.

Hours of employment play a complex role in determining the household division of labor. On the one hand, from a practical point of view, spouses who spend long hours in employment are not available to do household tasks and we would expect to see a negative correlation between responsibility for household tasks and hours of employment. On the other hand, the number of hours each spouse is employed is itself affected by the couple's ideology and the distribution of bargaining power in the marriage. In some marriages, hours of employment may be bargained jointly with responsibility for household tasks.

The relationships between task arrangement and hours of employment and earnings

Most economists expect that women who do a substantial amount of housework will both reduce their hours of paid work and earn less per hour. Becker (1985: S35), who seems to think that all married women are responsible for housework, puts forth a kind of conservation of energy theory, that married women have less energy to devote to their jobs. Not only are married women employed for fewer hours, he contends, but they also expend less energy during the hours they are employed (which reduces their productivity), leading to lower earnings per hour. Moreover, he argues, they reduce their investment in their own market human capital, which reduces their productivity and leads to lower earnings.

Feminist sociologists and economists dispute the assumption that all married women are responsible for housework tasks. Moreover, Denise Bielby and William Bielby's (1988) analysis of self-reports of intensity of work does not support Becker's suggestion that married women work less hard at their paid jobs than others do. Feminist social scientists think, rather, that it is discrimination that is likely to cause a relationship between a woman's responsibility for household tasks and lower earnings. This may be particularly true where women's household tasks and child care responsibilities prevent them from putting in the amount of "face time" required for promotion in certain professional and managerial careers.[6]

Three studies have looked specifically at the relationship between household task responsibility and earnings, but their results are conflicting. Using data on married middle managers in a large Canadian corporation, Kathy Cannings (1991) found that having more responsibility for household tasks did *not* have a significant effect on earnings for women, but decreased earnings for men. Hersch has looked at this matter in two studies. In one, using national data from the 1987 Panel Study of Income Dynamics (1991a), she found that additional time spent on household work reduced women's wages but increased men's wages. In the other study, using data she collected in Eugene, Oregon, in 1986 (1991b), she found that, for women, additional housework was negatively related to earnings, but for men there was no significant relationship. However, when job conditions variables were added to the earnings regression, time spent on housework was no longer significant for women either. Moreover, neither housework nor working conditions were important in a decomposition to explain the difference in earnings between women and men.

SURVEYING THE GRADUATES

In the spring of 1990, as Stanford University began preparing for a self-study for the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges, it decided to survey some of its graduates. Because some members of the class of 1981 had been extensively surveyed while they were students, as part of an on-going research project by Herant Katchadurian, Stanford chose to use that class. Strober was asked to participate in the survey design and to frame questions about work and family.

In May 1990, Stanford sent 1,600 surveys to all members of the class of 1981 and guaranteed them anonymity. Responses were received from 404 men and 330 women. The 46 percent response rate (48 percent for women and 44 percent for men) is about standard in the U.S. for this type of survey work.[7]

While we cannot know with certainty that the sample precisely mirrors the Stanford class as a whole in terms of such characteristics as marital status, job status, or the sharing of household tasks, the fact that the distribution of majors for both women and men in the sample so closely parallels the distribution of majors for the class as a whole, gives us confidence in the representativeness of the sample.

In September 1991, Chan sent the same questionnaire used by Stanford, translated into Japanese, to a random sample of one out of three men from each faculty (the Japanese name for academic department) and to all women graduates of the class of 1981 at Tokyo University (Todai). Because there were only about 260 women in that class, she also surveyed the women graduates from the classes of 1980 and 1982. Respondents were again

guaranteed anonymity. Thus she sampled 2,068 graduates, 1,227 men, and 841 women. Of these, 388 men and 190 women responded. The total response rate, 46 percent, was exactly the same as for Stanford.[8] However, while the Stanford response rate was about the same for women and men, the Todai response rate was 54 percent for men, but only 35 percent for women.

We compared the faculties of the Todai sample with the faculties for the entire class of 1981 (for men) and classes of 1980–82 (for women), and found that the former had slightly fewer men in law. There is also a small overrepresentation of men in engineering and of women in humanities and in science.

DEMOGRAPHICS OF THE GRADUATES

Gender and race

In the Stanford sample, of the 754 respondents, 55 percent were men and 45 percent were women. About 90 percent were Caucasian, 5 percent were Asian-American, 4 percent Hispanic, 2 percent African-American, 2 percent other (including those with more than one racial background), and less than 1 percent Native-American.[9] The number of people of color in each of these groups was too small to analyze the data by race. In the Todai sample there were 67 percent men and 33 percent women; all were Japanese except for one Korean.

Marital and parental status

Stanford women and men were quite different from the Todai women and men in terms of marital and parental status. However, within each of the university samples, the women and men were similar to one another on these dimensions. Among the Stanford graduates, 64 percent of the men and 62 percent of women were married. About 26 percent of women and men had never been married, but were living with a partner; 8 percent of women and men had never been married and were not living with a partner, 2 percent of men and 3 percent of women were divorced, a few were separated, and one woman was a widow.

The Todai graduates were much more likely to be married than their Stanford counterparts. Seventy-three percent of men and 74 percent of women were married; only one man and three women reported living with a partner. The divorce and separation rates were low and about the same for the Todai sample as for the Stanford sample, but a smaller percentage of Todai graduates, 24 percent of men and 20 percent of women, had never been married.

While only about 60 percent of married Stanford graduates had children,

72 percent of the Todai married men and 82 percent of the Todai married women had children. Also, Todai graduates, particularly the women, had children earlier than Stanford graduates. Twenty-two percent of the Todai women and 10 percent of the Todai men had a child aged 6 or over, as contrasted with only 5 percent of the Stanford women and 8 percent of Stanford men.

Because so few of the Todai graduates lived with partners, we analyze data only for those respondents who were married, 255 men and 205 women in the Stanford sample, and 267 men and 130 women in the Todai sample.[10]

DIVISION OF HOUSEHOLD TASKS

Who is responsible for doing household tasks?

There are at least three different questions that can be asked about household tasks:

1 How many hours of household tasks do you and your spouse perform each day (or week)?
2 What proportion of the total household tasks performed (including those not performed by one of the spouses) does each spouse do?[11]
3 How are household tasks divided between the two spouses?

It is important to note that we asked our respondents only the last question.

The survey question about household tasks asked: "How are household tasks divided between you and your partner?" The graduates were asked to circle one of the following five answers: "I do most," "I do more," "About equally," "Partner does more," "Partner does most." The categories in Table 1 were created by combining responses. Respondents who circled "I do most" or "I do more" were included in the "Self" category; those that circled "About equally" were placed in the "About equally" category and those that circled "Partner does more" or "Partner does most" were put in the "Spouse" category.

Stanford graduates were much more likely to share household tasks equally with their spouse than most Americans. As may be seen from Table 1, this was true of no less than 43 percent of Stanford graduates.[12] But 52 percent of Stanford women and men had the traditional gender division of household tasks, with women saying they did most or more of the household tasks and men saying their wives did most or more of them. Five percent of the men and women were in reverse-traditional families, where the husband did most or more of the household tasks.

When a couple has children, the total amount of household work increases greatly and the probability that they will share it equally decreases (Blair and Lichter 1991; Wenda O'Reilly 1983). To maintain equal sharing of household tasks in families with children requires that both spouses

Table 1 How household tasks are divided

Stanford sample

All married graduates and those with children, by gender

	All men		*Men with children*		*All women*		*Women with children*	
	N	%	*N*	%	*N*	%	*N*	%
Self	12	4.8	6	4.2	103	51.5	71	61.7
Spouse	130	52.2	92	64.3	10	5.0	3	2.6
About equal	107	43.0	45	31.5	87	43.5	41	35.7
Total	249	100.0	143	100.0	200	100.0	115	100.0

All full-time employed married graduates and those with children, by gender

	All men		*Men with children*		*All women*		*Women with children*	
	N	%	*N*	%	*N*	%	*N*	%
Self	9	4.1	5	3.9	37	34.6	13	31.7
Spouse	119	53.9	85	65.4	8	7.5	3	7.3
About equal	93	42.1	40	30.8	62	57.9	25	61.0
Total	221	100.1	130	100.0	107	100.0	41	100.0

Todai sample

All married graduates and those with children, by gender

	All men		*Men with children*		*All women*		*Women with children*	
	N	%	*N*	%	*N*	%	*N*	%
Self	7	2.7	4	2.2	111	86.7	89	88.1
Spouse	234	89.7	170	91.9	0	0.0	0	0.0
About equal	20	7.7	11	6.0	17	13.3	12	11.9
Total	261	100.1	185	100.0	128	100.0	101	100.0

All full-time employed married graduates and those with children, by gender

	All men		*Men with children*		*All women*		*Women with children*	
	N	%	*N*	%	*N*	%	*N*	%
Self	5	2.3	2	1.3	35	76.1	26	78.8
Spouse	200	91.7	144	94.1	0	0.0	0	0.0
About equal	13	6.0	7	4.6	11	23.9	7	21.2
Total	218	100.0	153	100.0	46	100.0	33	100.0

increase the amount of time they spend on household tasks. Hersch (1991b), using data from the 1987 Panel Study of Income Dynamics, found that in the U.S. married women without children spent 15.2 hours a week on housework, while married women with children spent 19.4 hours, a difference of 28 percent. For married men, the comparable figures were 7.6 hours and 9 hours, a difference of only 18 percent.

Table 1 shows that in the Stanford sample, equal sharing was much less likely when a couple had children than when they were childless. Almost 60 percent of Stanford men without children, but only about 32 percent with children, were likely to share household tasks equally, as did slightly more than half of Stanford women without children as compared to only 36 percent of those with children.

Unlike Stanford graduates, who were much more likely than the average American to share housework tasks equally with their spouse, Todai graduates had approximately the same low rate of sharing household tasks as all Japanese married couples. Only in the families of 8 percent of Todai men and 13 percent of Todai women was housework shared equally. No less than 87 percent of the women did more housework than their husbands, while 90 percent of the men did less housework than their wives. Three percent of the Todai men and none of the Todai women reported having reverse-traditional housework arrangements. There was some variation by parental status, with both women and men somewhat less likely to share equally if they had children.

The division of household tasks among full-time workers only is also reported in Table 1. Because the vast majority of Stanford and Todai men were employed full-time, there were few differences in sharing between all married men and married men working full-time. However, there were important differences among married women; consistent with both the bargaining power theory and the time availability theory, those who worked full-time were much more likely to share household tasks equally than those who did not. In the Stanford sample, 58 percent of women who were employed full-time, but only 27 percent of those who were not, shared household tasks about equally with their husbands. Among mothers, as many as 61 percent who were employed full-time shared household tasks about equally with their husbands, as compared to only 22 percent of the others.

Those relationships were similar for Todai women. Twenty-one percent of mothers who were employed full-time, but only 7 percent of other mothers, shared household tasks about equally with their husbands. These findings are very different from those in the 1982 Prime Minister's Office study, which found only a 10 percent difference in the rate of sharing between full-time homemakers and wives who worked full-time.

Table 2 summarizes the proportions of graduates who shared housework equally across more detailed categories. Earnings information for both

Table 2 Percentage of graduates who report jointly sharing household tasks

All respondents	*All respondents with children*		*All respondents without children*	
Stanford men	43.0	Stanford men	31.5	Stanford men	58.5
Stanford women	43.5	Stanford women	35.7	Stanford women	54.1
Todai men	7.7	Todai men	6.0	Todai men	11.8
Todai women	13.3	Todai women	11.9	Todai women	18.5

Full-time employed	*Full-time employed with children*		*Full-time employed without children*	
Stanford men	42.1	Stanford men	30.8	Stanford men	58.2
Stanford women	57.9	Stanford women	61.0	Stanford women	56.1
Todai men	6.0	Todai men	4.6	Todai men	9.2
Todai women	23.9	Todai women	21.2	Todai women	–[a]

Dual-earner couples	*Not full-time employed with children*		
Stanford men	49.4	Stanford men	–[a]
Stanford women	49.3	Stanford women	21.6
Todai men	21.8	Todai men	17.4
Todai women	23.2	Todai women	7.4

Note.
(a) Too few (less than 10) to compute meaningful percentage.

themselves and their spouses was provided by 170 Stanford men, 148 Stanford women, 56 Todai men and 55 Todai women. We call these respondents members of dual-earner couples.[13] For Todai men in dual-earner couples, the rate of sharing was 22 percent, about three times higher than that for all full-time employed Todai men, and virtually the same as for Todai women in dual-earner couples.

In fact, the majority of men in both samples who shared household tasks equally with their spouse were in dual-earner couples, 12 of the 20 in the Todai sample and 84 of 107 in the Stanford sample. Among the 17 Todai women who shared household tasks equally with their spouse, 13 were in dual-earner families, as were 73 of 87 Stanford women.[14]

Satisfaction with arrangements for dividing household tasks

Were Stanford and Todai graduates satisfied with the division of household tasks in their families? To find out, after we asked about how household tasks were divided, we asked: "Would you prefer to have a different arrangement?" Tables 3 and 4 look at the graduates' satisfaction with their family household task arrangements.

Among the Stanford men who shared household tasks about equally with their wives, the satisfaction rate was 87 percent; among those whose wives did all or more than half of the tasks, the satisfaction rate was virtually the same, 84 percent. Among Stanford women, however, the satisfaction rate was 94 percent for those who shared tasks about equally with their husband, as compared to only 47 percent for those with a traditional arrangement.

Like Stanford men, Todai men were largely satisfied with the arrangements they had. Of the 90 percent of Todai men who lived in families where housework was done largely or entirely by wives, 95 percent were satisfied with the arrangement. But 95 percent of the Todai men who had an egalitarian division of household labor were also satisfied.

Todai women, like Stanford women, had a much lower rate of satisfaction with household task division than their male classmates. Overall, 61 percent of Todai women were satisfied with their family's arrangement, very similar to the Stanford women's satisfaction rate of 68 percent. Among those in an egalitarian arrangement, 14 percent of the total, the satisfaction rate was 82 percent. But of those in a traditional arrangement, the rate of dissatisfaction was 40 percent, similar to the dissatisfaction rate for Stanford women with traditional household arrangements, but much higher than the rate for Japanese women in general. A 1984 survey in Japan found that only 13 percent of employed wives thought that household tasks should be shared equally (Mary Saso 1990: 134).

How did the presence of children affect satisfaction rates? Among Stanford men who shared household tasks about equally with their wives, those

Table 3 Numbers and percentages of those who prefer different arrangement for dividing household tasks: married graduates with and without children, by gender

Stanford sample

	Prefer different arrangement															
	With children								*Without children*							
	Men				*Women*				*Men*				*Women*			
How household tasks are divided	# *yes*	% *yes*	# *no*	% *no*	# *yes*	% *yes*	# *no*	% *no*	# *yes*	% *yes*	# *no*	% *no*	# *yes*	% *yes*	# *no*	% *no*
I do all or more than half	2	–	1	–	36	52.2	33	47.8	3	–	3	–	17	54.8	14	45.2
Spouse does all or more than half	14	15.2	78	84.8	1	–	2	–	6	16.2	31	83.8	4	–	3	–
About equal division	8	17.7	37	82.2	1	2.5	39	97.5	6	9.7	56	90.3	4	8.7	42	91.3
Total	24	17.1	116	82.8	38	33.9	74	66.1	15	14.3	90	85.7	25	29.8	59	70.2

Todai sample

	Prefer different arrangement															
	With children								*Without children*							
	Men				*Women*				*Men*				*Women*			
How household tasks are divided	# *yes*	% *yes*	# *no*	% *no*	# *yes*	% *yes*	# *no*	% *no*	# *yes*	% *yes*	# *no*	% *no*	# *yes*	% *yes*	# *no*	% *no*
I do all or more than half	1	–	3	–	33	40.2	49	59.8	1	–	2	–	9	40.9	13	59.1
Spouse does all or more than half	10	6.1	154	93.9	0	0.0	0	0.0	2	3.3	59	96.7	0	–	0	–
About equal division	1	10.0	9	90.0	3	25.0	9	75.0	0	–	9	–	0	–	5	–
Total	12	6.4	166	93.3	36	37.5	58	61.7	3	4.1	70	95.9	9	33.3	18	66.7

Table 4 Percentage who preferred a different arrangement for dividing household tasks: married women with children

Stanford sample

	Preferred different arrangement											
	Full-time homemakers				*Part-time employed*				*Full-time employed*			
How household tasks are divided	# *yes*	% *yes*	# *no*	% *no*	# *yes*	% *yes*	# *no*	% *no*	# *yes*	% *yes*	# *no*	% *no*
I do all or more than half	12	40.0	18	60.0	14	53.9	12	46.2	10	76.9	3	23.1
Spouse does all or more than half	0	–	0	–	0	–	0	–	1	–	2	–
About equal division	0	–	7	–	1	–	8	–	0	0.0	24	100.0
Total	12	32.4	25	67.6	15	42.9	20	57.1	11	27.5	29	72.5

Todai sample

	Preferred different arrangement											
	Full-time homemakers				*Part-time employed*				*Full-time employed*			
How household tasks are divided	# *yes*	% *yes*	# *no*	% *no*	# *yes*	% *yes*	# *no*	% *no*	# *yes*	% *yes*	# *no*	% *no*
I do all or more than half	4	22.2	14	77.8	13	34.2	25	65.8	16	61.5	10	38.5
Spouse does all or more than half	0	–	0	–	0	–	0	–	0	–	0	–
About equal division	0	–	1	–	1	–	3	–	2	–	5	–
Total	4	21.2	15	78.9	14	33.3	28	66.7	18	54.5	15	45.5

without children had a 90 percent rate of satisfaction compared to 82 percent among those with children. On the other hand, among Stanford women who shared tasks about equally with their husbands, 98 percent of those without children were satisfied. In the mothers and 91 percent of traditional social norms, these findings make sense since housecontext of hold tasks require more time and effort when there are children in the family, so that fathers might be less pleased, and mothers more pleased, with an egalitarian division as compared to men and women without children.

Because of the small number of Todai women without children, we do not compare their satisfaction rates with those of Todai mothers. Among Todai men, the satisfaction rates were above 90 percent for those with children and without for both traditional and egalitarian arrangements.

In Table 4 we compare the rates of satisfaction with household arrangements for mothers who were full-time homemakers, part-time employed and full-time employed. As might be expected, the more engaged in paid work, the greater the percentage dissatisfied with a traditional task arrangement. In the Stanford sample, among mothers with traditional task arrangements, 40 percent of full-time homemakers, 46 percent of part-time employed mothers, and 77 percent of full-time employed mothers were dissatisfied with their traditional task arrangement.[15] A similar picture emerged for Todai mothers. Among the 87 percent with a traditional arrangement, 92 percent of homemakers, 34 percent of part-time employed mothers, and 61 percent of full-time employed mothers were dissatisfied with their household task arrangement.[16]

BARGAINING POWER, HOURS OF PAID WORK, AND HOUSEHOLD TASK ARRANGEMENTS

For the graduates in dual-earner couples, we ran probit regressions to look at the relationship between earnings and hours of paid work on the one hand and sharing of household tasks on the other hand. In all these regressions, the dependent variable took on a value of 1 if the respondent shared equally and a value of 0 if the respondent had a traditional division of labor where the wife did all or most of the tasks. Those few graduates in families where the husband was responsible for doing all or most of the tasks were excluded from the analyses.

The four independent variables were: husband's annual earnings, wife's annual earnings, the ratio of wife's to husband's earnings, and the graduate's number of hours per week of paid work. Because these four independent variables were highly correlated, we ran four separate regressions. In each regression, the dummy variable for household task arrangements was regressed on one of the four independent variables; there were no control variables in any of the regressions. Table 5 reports the effect on the

probability that the couple would share housework of a 1,000 dollar or 1,000 yen increase in earnings,[17] a 1 percentage point increase in the ratio of wife's to husband's earnings or a one-hour increase in hours of paid work.

We expected that higher earnings for the wife and higher ratios of wife's earnings to husband's earnings would have a positive effect on the probability that the couple would share household tasks equally. Similarly, we expected that the higher the husband's earnings, the lower the likelihood that the couple would share household tasks equally (Goldscheider and Waite 1991; Elizabeth Maret and Barbara Finlay 1984; Ross 1987). We also expected that, for wives, there would be a positive relationship between hours of employment and the probability of sharing household tasks equally; for husbands, we expected a negative relationship.

The results for all four samples provide some support for the bargaining power theory. For Stanford and Todai men, wife's earnings and the ratio of wife's to husband's earnings were significantly positively related to the probability of sharing household tasks about equally. In addition, for

Table 5 Effects of earnings and hours employed on the probability of sharing household tasks in dual-earner couples[a]

	Stanford men	*Stanford women*	*Todai men*	*Todai women*
	N = 160	*N = 139*	*N = 56*	*N = 56*
Percent sharing	52.5	52.5	23.1	23.2
Regression 1				
Effect of wife's earnings	+0.00444**	+0.00014	+0.00072**	+0.00034
Regression 2				
Effect of husband's earnings	−0.00187^	−0.00185*	−0.00050	+0.00004
Regression 3				
Effect of ratio of wife's earnings/ husband's earnings	+0.3106**	+0.09695^	+0.54357**	+0.13325
Regression 4				
Effect of number of hours respondent was employed	−0.00191	+0.01195**	−0.00837*	+0.00316

** Significant at 1% level.
* Significant at 5% level.
^ Significant at 10% level.

Note:
(a) Probability derivatives are calculated from probit regressions where sharing tasks = 1, not sharing = 0. Regressions have a constant and only one independent variable.

Stanford men, husband's earnings were significantly negatively related to the probability of sharing household tasks about equally.

For Todai women, the higher their own earnings, the higher the probability that they shared household tasks about equally. For Stanford women, the higher the ratio of wife's to husband's earnings, the higher was the probability of sharing household tasks about equally. Also, the higher their husband's earnings, the lower was their probability of sharing household tasks about equally. This last result is similar to the one for Stanford men.

Hours of paid work significantly affected the division of household tasks only for Stanford women and Todai men. The more hours Stanford women in dual-earner families were engaged in paid work, the greater their likelihood of sharing household tasks about equally with their husband. However, for Todai men the greater the number of hours spent in paid work, the *less* likely they were to share about equally in household tasks.

THE RELATIONSHIP BETWEEN HOUSEHOLD TASK ARRANGEMENTS, NUMBER OF HOURS OF PAID WORK, AND EARNINGS

We turn now from looking at the relationships between number of hours spent in paid work and earnings on household task arrangement for dual-earner couples to analyzing the relationships between household task arrangement on hours of paid work and earnings for all married graduates. We look first at the relationship between sharing of tasks and hours of paid work and then the relationship between sharing of tasks and earnings.

Relationship between household task arrangement and number of hours of employment

Table 6 presents the means and standard deviations of the variables in a regression to examine the effect of household task arrangement on number of hours employed for all earners and for full-time earners. Among the full-time earners, Stanford men were employed 56.4 hours a week, about 5 hours more a week than Stanford women. In the Todai sample, men were employed 52.5 hours a week, about 6 more hours than Todai women. In the all-earner regressions, 25 percent of the Stanford women and 29 percent of the Todai women were employed part-time, defined as fewer than 35 hours per week.

For women, the zero–one (dummy) variable measuring household task arrangement took on the value of 1 if she did *more than half* of household tasks and was zero otherwise. For the men, the variable took on the value of 1 if he did *at least half* of the household tasks and was zero otherwise. We expected that both of these variables would be negatively associated with

Table 6 Means and standard deviations of variables in OLS regressions to examine how household task responsibility affects hours employed for all earners and full-time earners, by gender

	All earners				*Full-time earners*			
	Stanford		*Todai*		*Stanford*		*Todai*	
Variables	*Men N=227*	*Women N=146*	*Men N=234*	*Women N=66*	*Men N=221*	*Women N=110*	*Men N=218*	*Wom N=6*
Number of hours employed/week	55.4 (14.8)	43.55 (17.43)	50.14 (12.81)	38.17 (15.47)	56.4 (13.7)	51.1 (12.4)	52.5 (9.4)	49.3 (7.8)
Number of years employed full-time	6.6 (2.7)	6.3 (2.6)	9.43 (2.53)	7.94 (3.86)	6.72 (2.7)	6.70 (2.7)	9.68 (2.9)	9.28 (2.8)
Number of years employed part-time	0.51 (1.09)	1.04 (1.74)	0.73 (2.12)	1.45 (2.61)	0.48 (1.03)	0.69 (1.67)	0.29 (1.56)	0.48 (1.16)
Percent financial manager	0.09 (0.28)	0.05 (0.21)	–	–	0.09 (0.29)	0.06 (0.25)	–	–
Percent lawyer	0.15 (0.36)	0.08 (0.26)	–	–	0.15 (0.36)	0.08 (0.28)	–	–
Percent marketing manager	0.08 (0.27)	0.12 (0.32)	–	–	0.08 (0.27)	0.15 (0.35)	–	–
Percent medical doctor	0.18 (0.38)	0.08 (0.35)	–	–	0.17 (0.38)	0.15 (0.36)	–	–
Percent misc. manager	0.08 (0.28)	0.10 (0.30)	–	–	0.09 (0.28)	0.11 (0.31)	–	–
Percent technical manager	0.12 (0.30)	0.03 (0.30)	–	–	0.10 (0.30)	0.04 (0.19)	–	–
Percent technical professional	0.12 (0.32)	0.08 (0.26)	0.05 (0.22)	0.05 (0.21)	0.12 (0.32)	0.08 (0.28)	0.05 (0.22)	0.08 (0.28)
Percent manager	–	–	0.15 (0.36)	0.03 (0.17)	–	–	0.16 (0.36)	0.08 (0.28)
Percent professor	–	–	0.09 (0.29)	0.15 (0.36)	–	–	0.07 (0.26)	0.08 (0.28)
Percent researcher	–	–	0.14 (0.35)	0.15 (0.36)	–	–	0.15 (0.35)	0.21 (0.41)
Percent teacher	–	–	0.04 (0.19)	0.06 (0.24)	–	–	0.03 (0.16)	0.04 (0.20)
Percent in company ≥ 1,000 employees	–	–	0.62 (0.49)	0.21 (0.41)	–	–	0.65 (0.48)	0.25 (0.43)
Percent government employees	–	–	0.18 (0.39)	0.23 (0.42)	–	–	0.20 (0.40)	0.39 (0.49)
Percent parent	0.58 (0.49)	0.48 (0.50)	0.70 (0.46)	0.74 (0.44)	0.59 (0.49)	0.38 (0.49)	0.70 (0.46)	0.72 (0.45)
Percent does less than half of household tasks	–	0.42 (0.50)	–	0.79 (0.41)	–	0.34 (0.47)	–	0.79 (0.41)
Percent does at least half of household tasks	0.47 (0.50)	–	0.10 (0.30)	–	0.46 (0.50)	–	0.08 (0.28)	–

hours of employment either because those with more household tasks had less time for employment or because those with more hours of employment had less time for household work.

The control variables in the regression were work experience (number of years employed full-time and number of years employed part-time), a series of occupational dummy variables, a dummy variable to measure parental status and, for the Todai sample, two dummy variables measuring size of employer and whether or not the respondent was a government employee.

Table 7 gives the parameter estimates for the regressions. We found that for Stanford men and Todai women, holding constant all of the variables listed, number of hours of employment was not significantly related to household task arrangement. However, for Stanford women and Todai men, there was a significant relationship between these two variables.

Holding constant the other variables in the regression, Stanford women who were employed full-time and were responsible for doing more than half of household tasks were employed 7 hours per week less than other full-time earner women. In the regression that included part-time as well as full-time earners, Stanford women responsible for more than half of household tasks were employed about 9.5 hours per week less than other women. Todai men who were responsible for half or more than half of household tasks were employed about 7.75 hours less per week in the all-earner sample and about 4.5 hours less per week if they were full-time earners.

Holding all else constant, being a mother had a significant negative effect on hours of employment for Stanford women in the all-earner sample (a reduction of about 6.25 hours per week) and for Todai women in the full-time earner sample (a reduction of about 7.5 hours per week). Being a father in the Todai sample also was significantly negatively related to hours employed. Holding constant the other variables in the regression, on average Todai men who were fathers and employed full-time were employed about 3.6 hours less per week than nonfathers. This is an interesting finding in light of comments made on the surveys by some Todai fathers who said they found it difficult to parent their children because of their long working hours.

Relationship between household task arrangements and earnings[18]

Having primary responsibility for household tasks had less of an effect on earnings than it had on hours of employment. Once hours of employment were accounted for, there were no further significant effects on earnings, except for Stanford men, whose earnings were reduced if they did half or more than half of household tasks.

Table 8 gives the means and standard deviations of the variables in a

Table 7 How do gender, parental status, and responsibility for doing household tasks affect hours employed? (Parameter estimates from OLS regression analysis predicting number of hours worked per week)

	All earners				*Full-time earners*			
	Stanford		*Todai*		*Stanford*		*Todai*	
Variable	*Men N = 227*	*Women N = 146*	*Men N = 234*	*Women N = 66*	*Men N = 221*	*Women N = 110*	*Men N = 218*	*Women N = 47*
Intercept	61.89**	48.15**	43.92**	34.37**	66.17**	61.79**	49.55**	48.06**
Number of years employed full-time	−0.99*	0.01	0.65	−1.29*	−1.32**	−1.05**	0.54	0.63
Number of years employed part-time	−2.15**	−1.85*	−0.61	−1.77*	−1.48^	−0.94	0.52	−0.08
Financial manager	4.44	9.75	–	–	2.76	1.38	–	–
Lawyer	0.32	5.51	–	–	−2.43	1.35	–	–
Marketing manager	−1.22	5.79	–	–	−2.72	−1.81	–	–
Medical doctor	12.06**	15.99**	–	–	11.66**	7.52*	–	–
Misc. manager	3.01	4.34	–	–	1.67	−1.92	–	–
Technical manager	−0.60	11.18	–	–	−2.08	3.10	–	–
Technical professional	−7.48*	−1.24	−0.52	−6.99	−8.52**	−9.80*	0.64	13.36**
Manager	–	–	−3.00	−5.60	–	–	−2.98	−0.45
Professor	–	–	−1.42	−1.64	–	–	0.60	−1.36
Researcher	–	–	0.57	−5.13	–	–	−1.02	5.64
Teacher	–	–	−10.11**	−5.06	–	–	−9.81**	−1.90
Company ≥1,000 employees	–	–	3.71	0.25	–	–	0.65	−0.39
Government employee	–	–	10.30**	1.46	–	–	4.36*	−4.51
Parent	−0.17	−6.26*	−2.83^	−5.73	−0.73	2.15	−3.61*	−7.47**
Does less than half of household tasks	–	−9.48**	–	−0.11	–	−7.10**	–	0.20
Does at least half of household tasks	−1.00	–	−7.77*	–	−0.67	–	−4.46^	–
Adjusted R^2	0.21	0.26	0.18	0.37	0.30	0.15	0.06	0.16
F	6.59**	5.55**	5.65**	4.45**	9.72**	2.80**	1.97**	1.81^

Notes:
** Significant at 1% level.
* Significant at 5% level.
^ Significant at 10% level.

regression to examine the effect of household task arrangement on earnings for all earners and full-time earners. In both the Stanford and the Todai full-time earner samples, married women earned 72 percent of what their married male classmates earned. The household task variables were defined exactly as for the regression examining the effect of household task arrangement on hours of employment. The control variables were number of years of work experience,[19] hours employed, a series of occupational dummy variables, a dummy variable equal to 1 if the graduate was a parent, and, for the Todai regressions, the same two employer dummy variables included in the Todai hours regressions.[20]

Table 9 tells us that Stanford women who were employed part-time paid a large earnings penalty; they earned less per hour of work than women who were employed full time. However, after paying this penalty, they paid no additional penalty for having responsibility for more than half of the household tasks in their family.[21] However, Stanford men in the all-earner sample earned about 12 percent less, all other variables held constant, if they did half or more of the household tasks. In the full-time earner regression, they earned 11 percent less.[22]

It is also interesting that in these regressions being a mother did not have a significant effect on earnings. Being a father had no significant effect in the Stanford regressions, but it did have a significant *positive* effect in the Todai regressions. This result is not surprising since earnings supplements for men (but not for women) who are parents are built into the wage structure in many Japanese companies.

In summary, all other things held constant, Stanford women in the all-earner sample and Todai women and men in the full-time earner sample were employed significantly fewer hours per week if they had children. And Stanford women paid an earnings penalty for part-time employment. But neither Stanford nor Todai women paid an earnings penalty for motherhood or for doing the lion's share of household tasks. Rather, it was men who deviated from social norms who paid wage penalties: Todai men who did not have children, and Stanford men who did substantial amounts of housework earned significantly less than other men.[23]

It is likely that Todai men who did not have children earned less than Todai men who were fathers because so many companies pay an earnings premium to fathers. However, it is more difficult to explain why Stanford men who were egalitarian in sharing housework paid an earnings penalty. We know that for Stanford men hours spent in paid work were not significantly related to the probability of sharing household work about equally in dual-career couples. So it seems unlikely that they put in less "face time" at work, which might have "signaled" less work commitment. Also, while Todai men who were professors were more likely to be in egalitarian families than Todai men in other occupations, among Stanford men, occupation did not differentiate between those who were more egalitarian with

Table 8 Means and standard deviation of variables in OLS regressions to examine how household task responsibility affects earnings for all earners and full-time earners

	All earners				*Full-time earners*			
	Stanford		*Todai*		*Stanford*		*Todai*	
Variable	*Men N = 227*	*Women N = 146*	*Men N = 234*	*Women N = 66*	*Men N = 221*	*Women N = 111*	*Men N = 218*	*Women N = 47*
ln earnings	4.0720752 (0.5851082)	3.5795464 (0.7958070)	6.5374972 (0.3509090)	6.0373152 (0.7510804)	4.0862447 (0.5717930)	3.8034900 (0.4788985)	6.5455783 (0.3232781)	6.2631805 (0.4291116)
Number of years employed full-time	6.64 (2.69)	6.30 (2.65)	9.43 (2.53)	7.94 (3.86)	6.73 (2.65)	6.68 (2.70)	9.68 (2.15)	9.53 (2.82)
Number of years employed part-time	0.51 (1.09)	1.04 (1.74)	0.73 (2.12)	1.45 (2.61)	0.48 (1.03)	0.69 (1.67)	0.49 (1.56)	0.43 (1.14)
Hours employed/week	–	–	–	–	56.4 (13.7)	51.4 (12.6)	52.5 (9.4)	46.3 (7.8)
Percent employed part-time	0.03 (0.16)	0.25 (0.43)	0.07 (0.25)	0.29 (0.46)	–	–	–	–
Number of hours empl./ wk. times part-time	0.52 (3.28)	5.05 (9.61)	1.22 (5.00)	5.20 (9.91)	–	–	–	–
Number of hours empl./ wk. times full-time	54.9 (16.3)	38.5 (24.6)	48.9 (16.1)	33.0 (22.1)	–	–	–	–
Percent financial manager	0.09 (0.28)	0.05 (0.21)	–	–	0.09 (0.29)	0.06 (0.24)	–	–
Percent lawyer	0.15 (0.36)	0.08 (0.26)	–	–	0.15 (0.36)	0.08 (0.27)	–	–
Percent marketing manager	0.08 (0.27)	0.12 (0.32)	–	–	0.08 (0.27)	0.14 (0.35)	–	–
Percent medical doctor	0.18 (0.38)	0.14 (0.35)	–	–	0.17 (0.38)	0.08 (0.27)	–	–

Table 8 Continued

	All earners				*Full-time earners*			
	Stanford		*Todai*		*Stanford*		*Todai*	
Variable	*Men N = 227*	*Women N = 146*	*Men N = 234*	*Women N = 66*	*Men N = 221*	*Women N = 111*	*Men N = 218*	*Women N = 47*
Percent misc. manager	0.08 (0.28)	0.12 (0.30)	–	–	0.09 (0.28)	0.11 (0.31)	–	–
Percent technical manager	0.10 (0.30)	0.03 (0.16)	–	–	0.10 (0.30)	0.04 (0.19)	–	–
Percent technical professional	0.12 (0.32)	0.08 (0.26)	0.05 (0.22)	0.05 (0.21)	0.12 (0.32)	0.08 (0.27)	0.05 (0.22)	0.06 (0.25)
Percent manager	–	–	0.15 (0.36)	0.03 (0.17)	–	–	0.16 (0.36)	0.04 (0.20)
Percent professor	–	–	0.09 (0.29)	0.15 (0.36)	–	–	0.07 (0.26)	0.09 (0.28)
Percent researcher	–	–	0.14 (0.35)	0.15 (0.36)	–	–	0.15 (0.35)	0.21 (0.41)
Percent teacher	–	–	0.04 (0.19)	0.06 (0.24)	–	–	0.03 (0.16)	0.04 (0.20)
Percent co. ≥ 1,000 employees	–	–	0.62 (0.49)	0.21 (0.41)	–	–	0.65 (0.48)	0.28 (0.45)
Percent government employees	–	–	0.18 (0.39)	0.23 (0.42)	–	–	0.20 (0.40)	0.30 (0.46)
Percent parent	0.58 (0.49)	0.48 (0.50)	0.70 (0.46)	0.74 (0.44)	0.59 (0.49)	0.38 (0.49)	0.70 (0.45)	0.70 (0.46)
Percent does *more than half* of household tasks	–	0.42 (0.50)	–	0.79 (0.41)	–	0.33 (0.47)	–	0.74 (0.44)
Percent does *at least half* of household tasks	0.47 (0.50)	–	0.10 (0.30)	–	0.46 (0.50)	–	0.08 (0.28)	–

Table 9 How do gender, parental status, and household task responsibility affect earnings for all earners and full-time earners? (Parameter estimates from OLS regression analysis predicting the natural log of earnings)

	All earners				*Full-time earners*			
	Stanford		*Todai*		*Stanford*		*Todai*	
Variable	*Men N = 227*	*Women N = 146*	*Men N = 234*	*Women N = 66*	*Men N = 221*	*Women N = 111*	*Men N = 219*	*Women*
Intercept	3.700**	3.489**	5.893**	5.126**	3.787**	3.218**	6.049**	
Number of years full-time employment	0.038*	0.019	0.027*	0.057*	0.034*	0.040*	0.016	
Number of years part-time employment	–0.027	–0.018	0.000	–0.045	–0.051	–0.016	0.019	
Hours employed/ week	–	–	–	–	–0.005^	0.001	0.006**	
Percent employed part-time	–0.877	–1.897**	0.417^	0.123	–	–	–	
Number of hours employed/wk. times part-time	0.025	0.056**	–0.006	0.025^	–	–	–	
Number of hours employed/wk. times full-time	–0.005^	–0.002	0.005*	0.021^	–	–	–	
Parent	0.048**	–0.071	0.111*	–0.070	0.046	–0.071	0.083^	
Financial manager	0.810**	0.462^	–	–	0.789**	0.377*	–	
Lawyer	0.728**	0.717**	–	–	0.707**	0.606**	–	
Marketing manager	0.519**	0.350^	–	–	0.491**	0.327*	–	
Medical doctor	0.449**	0.535**	–	–	0.407**	0.358**	–	
Misc. manager	0.737**	0.254	–	–	0.709**	0.178	–	
Technical manager	0.459**	0.489	–	–	0.436**	0.426^	–	
Technical professional	0.306**	0.296	–0.283**	–0.225	0.245*	0.273*	–0.296**	
Manager	–	–	–0.100	0.074	–	–	–0.082	
Professor	–	–	–0.027	0.340^	–	–	–0.096	
Researcher	–	–	–0.154*	–0.208	–	–	–0.175**	
Teacher	–	–	–0.093	–1.114**	–	–	–0.196	
Employed in co. ≥ 1,000	–	–	0.178**	0.026	–	–	0.144*	
Employed in government	–	–	–0.145*	–0.236	–	–	–0.185**	
Does *more than half* of household tasks	–	0.047	–	–0.204	–	0.104	–	
Does *at least half* of household tasks	–0.117^	–	0.002	–	–0.107	–	0.002	
Adjusted R^2	0.318	0.359	0.231	0.531	0.303	0.155	0.221	
F	8.508**	6.787**	5.987**	6.262**	8.984**	2.684**	6.179**	

Notes:
** Significant at 1% level. * Significant at 5% level. ^ Significant at 10% level.

respect to household work and those who were not. Perhaps it is simply that more flexible jobs permit a high level of sharing at home, but also pay less.

CONCLUSION

We agree with Bergmann's view that gender equity requires not only that women and men play similar economic roles in the workplace, but also in the home. There are important negative effects of a "double shift" for women. In the short run, it breeds marital discontent among many wives, as witnessed by the high rates of dissatisfaction in our samples among full-time employed women with traditional household task arrangements. Moreover, in the long run, it may well have a chilling effect on younger women who would like the opportunity to combine career and family without an extremely heavy total work load.

In Japan, as the birth rate has plummeted, both corporate and government leaders have recognized, with considerable consternation, that unless they make it possible for women to pursue their career when they have young children, many women will choose paid work over family. In the U.S., the situation is different. As Myra Strober has argued elsewhere (1997), many young women in the U.S. have raised the ante for success. Having benefited from the experiences of the pioneer women of their mother's generation, they no longer simply wish to combine career and family. If they decide to have both, they do not consider the combination successful if it results in a double shift; rather, they want career and a sustained egalitarian relationship with egalitarian parenting.

For those concerned with gender equity, our results have a good news/bad news quality. On the good news side, at least in the U.S., higher educational attainment seems to be associated with a greater degree of sharing household tasks about equally, particularly among childless couples and among mothers who were employed full-time. Another piece of the good news is that, among both Todai and Stanford graduates, male and female, those who shared housework about equally had very high rates of satisfaction with their arrangements. Finally, it bodes well for women's progress that women's greater economic power in the workplace appears to translate into a higher probability of equally sharing tasks in the home. While it is not possible for public policies to directly affect the household division of labor, they may well have an indirect effect if they succeed in raising women's earnings, because this increases women's bargaining power at home.

However, there are several less sanguine aspects of our results. First, it is clear that higher education, alone or combined with economic bargaining power, does not necessarily lead to more equal sharing of household tasks. In fact, rates of equal sharing among Todai graduates were as low as those of the Japanese population in general, and even among mothers who were

employed full-time and men in dual-earner families, only slightly more than 20 percent shared housework equally. Second, the fact that Todai men in traditional task arrangements had such high rates of satisfaction with their arrangements also does not bode well for increased sharing.

The Todai findings underscore the importance of education, the media and a strong women's movement in creating new social norms. Japan has had little "push" for such change. In 1986 a fairly weak law was passed to increase gender equity in the workplace. But until very recently there has been virtually no organized women's movement in Japan and little discussion of the relationship between gender equity in the workplace and in the home. The contrast in the Todai and Stanford percentages of equal sharing of housework suggests that changes in societal ideology are a prerequisite for changes in behavior, even for highly educated couples, and even when women have some economic bargaining power.

The prognosis for Stanford and Todai women in traditional household task arrangements who were dissatisfied is complicated, particularly in light of the high rate of satisfaction with such arrangements among Stanford and Todai men. It is possible that wives' dissatisfaction may lead them to push for additional sharing. But there is certainly no guarantee, either that they will push or that they will be successful. In the U.S., where wives can return to the labor market if they have taken time out to be traditional wives and mothers, the possibility of economic independence combined with continued discontent about household arrangements may well lead women to "bargain harder." And having an intransigent husband in such a situation may lead to divorce. In Japan, however, both hard bargaining and divorce are much less likely. The first is difficult because of the lock-step arrangements in most Japanese companies and government agencies. The second is difficult because divorce remains unacceptable in most Japanese families.[24] Therefore, it is not clear whether the high rates of discontent among Todai women will lead to more rapid change.[25]

Finally, although the highly educated women in our samples did not pay a direct earnings penalty for being a mother or for doing the lion's share of housework in their families, they appear to have paid an indirect penalty. Stanford women who chose part-time employment paid a considerable earnings penalty. And from some of our other work which decomposes the gender earnings differential, we know that in regressions holding constant work experience, hours of work, occupation, marital status, and parental status, about one-quarter of the gender earnings differential in the Todai sample was due to the fact that women were so much less likely than men to be employed in a large company (more than 1,000 workers). While the employment policies of large companies in Japan have excluded single as well as married women, several women in our sample indicated in their survey comments that they were forced to leave employment in large companies when they married or became mothers.

On balance, we are cautiously optimistic about the possibilities for attaining gender equity in both the workplace and the home. But the task will not be easy. Our results indicate that it will require continued changes in ideology, which are not likely to come about without a strong women's movement that has political power, as well as continued increases in women's economic bargaining power, that is, their job prospects and earnings.

Myra H. Strober, School of Education, Stanford University, Stanford, CA 94305, USA
e-mail: myras@leland.stanford.edu
Agnes Miling Kaneko Chan, 5-9-20 Hiroo, Shibuya, Tokyo 50, Japan

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NOTES

[1] Employed men with employed wives or partners were somewhat more likely to say they shared tasks equally than all men, but still the majority of them did not report egalitarian sharing patterns: 27 percent said they shared cleaning equally, and 15 percent said they shared cooking equally. Similarly, employed women whose husband or partner was also employed reported only very slightly higher rates of sharing than all women, 7 percent shared cooking equally, and 15 percent shared cleaning equally (Families and Work Institute 1993: 48–9). While women had the overwhelming responsibility for cooking, cleaning, shopping, and paying bills, men were responsible for repairs. Ninety-one percent of men reported that they were responsible for repairs; 71 percent of women reported their husbands were responsible for repairs.

[2] Respondents were asked who primarily did the following tasks: infant care, shopping, preparing meals, cleaning up after meals and washing the dishes, laundry, and house cleaning (Japanese Prime Minister's Office 1984).

[3] Blair and Lichter, Presser, and South and Spitze all analyze data from the 1988 National Survey of Families and Households where each partner estimated the number of hours spent on eight tasks (preparing meals, washing dishes, cleaning house, outdoor tasks, shopping, washing and ironing, paying bills, and auto maintenance). Blair and Lichter calculated each partner's percentage distribution of time across all tasks. Presser looked both at the wife and husband's *shares* of total time spent and the absolute number of hours spent by each spouse. South and Spitze looked at the absolute number of hours spent on housework. Goldscheider and Waite, using data from the National Longitudinal Surveys of young and mature women, concentrated their analyses on the proportion of household work done by each spouse. The women in this longitudinal sample were asked who in their household took responsibility for a series of tasks (cooking, cleaning, washing dishes, doing laundry, grocery shopping, caring for

children, doing yard work, home maintenance, and family paperwork), whether that person had shared or sole responsibility, and what proportion of each task each person had. The Ross study also looks at relative responsibility for household tasks. The sample consisted of married couples, both of whom were interviewed in a 1978 telephone survey of a national probability sample of U.S. households. The dependent variable in this study was the division of labor in the home, an index composed of the mean response to questions about responsibility for meal preparation, shopping, care of children, daily chores, and meal cleanup.

[4] This paper is part of a larger study of the graduates of Stanford and Todai. See Myra Strober and Agnes M. K. Chan (forthcoming).

[5] Gary Becker's (1981) theory of comparative advantage (that women have a comparative advantage at homemaking and men at breadwinning) these days is generally translated into a bargaining model. For a review of these models see Bina Agarwal (1997) and Elizabeth Katz (1997).

[6] "Face time" is the need to be personally present on the job, even when that does not result in additional productivity. This may take the form of pressure to come early, to stay at one's desk during lunch, and, most often, to stay late, as Strober learned in her consulting work.

[7] Stanford did not send a second questionnaire to nonrespondents. Strober attempted to contact a random sample of 155 nonrespondents by telephone, to ask them a few brief questions, but was able to reach only 43 percent of them.

[8] The response from the first questionnaire sent out was only 430, or 34 percent. Nonrespondents for whom we had correct addresses were then called. Of these, 276 said they would not respond. The remaining 554 received a second copy of the questionnaire and 148 returned it. Thus, 578 questionnaires were returned from the two mailings combined. Of the 578 respondents, 23 men and 11 women were not in the correct class and were removed from the sample. The final sample included 544 respondents, 179 women and 365 men.

[9] Only among African-Americans was there a gender difference; there were three African-American men in the sample (less than 1 percent of all men in the sample) and ten African-American women (3 percent of all women in the sample).

[10] Also, because we failed to ask those living with a partner whether they were living with a same-sex or opposite-sex partner, our findings on those living with a partner are difficult to interpret. We think that more research on household task division among partners, particularly research on same-sex partners, is needed.

[11] Forty-two percent of the Stanford men and 47 percent of the Stanford women had regular paid household help, but the vast majority for only a few hours a week. Further, only 3 percent of the Todai men and 13 percent of the women did, although some of them may have had help from their mother or mother-in-law. These figures suggest that even highly educated couples with professional or managerial jobs tend not to use paid help to solve the problem of who does household chores.

[12] We have no way of knowing to what extent perceived social pressure to appear either egalitarian or single-mindedly work-oriented may have influenced some respondents' answers to the question about sharing household work. However, the fact that Stanford men and women had equal rates of sharing and that Todai men and women had approximately equal rates of sharing may be evidence of a high degree of truthfulness when answering this question.

[13] Dual earners may have been employed either full-time or part-time.

[14] Although not reported in this paper, we also looked at married respondents'

sharing of household management and financial responsibility. Couples who shared these responsibilities as well as household tasks about equally were labeled egalitarian. Thirty-five percent of Stanford men, 38 percent of Stanford women, 6 percent of Todai men, and 12 percent of Todai women were in egalitarian couples. We found that among both Stanford and Todai women, those in occupations that are nontraditional for women were more likely to be in egalitarian families. Among Todai men, professors were more likely to be in egalitarian families; indeed, of the seventeen Todai men who were in egalitarian families, eight were professors.

[15] Bergmann (1986: 268) labeled women who were employed full-time and did most of the housework as "drudge wives." She found that 47 percent of these wives said they would have liked more help from their husbands.

[16] In the Stanford sample, of seven homemakers, nine part-time employed and twenty-four full-time employed mothers with an egalitarian task arrangement, all but one was satisfied with it.

[17] The average dollar/yen exchange rate for 1990 was 144.79 (United Nations 1995: 160, 168). The purchasing power parity rate for Japan per U.S. dollar in 1990 was 168 (OECD 1990: 37).

[18] The results in this section pertain only to married women and men who are employed. To determine whether our regression coefficients would generalize to the hypothetical situation where all respondents were employed, we tested for sample selection bias in the four female samples. Because it provides more valid standard errors than the Heckman model for calculating sample selection bias, we used the generalized Tobit model (the Sampsel procedure in TSP). Additional information about the procedure and the specific probit regressions used are available from the authors. For both Stanford women's regressions and for the regression for all-earner Todai women, the exercise indicated that the coefficients could not be generalized. However, the differences in coefficients for the Stanford regressions were negligible. For the Todai all-earner regression, the major effect was that the earnings penalty associated with being a mother was larger in the generalized Tobit model.

[19] When we attempted to include experience squared in the regressions, as is usually done, it yielded nonsensical results. The reason for this presumably is that these graduates, with a maximum of ten years of work experience, had not yet run into diminishing returns.

[20] We also tried an alternative specification, substituting variables measuring educational attainment for the occupation variables. The regression fit was better with the occupation variables.

[21] Given the nature of the Japanese labor market, almost all of those employed in companies with more than 1,000 workers have been in the labor market continuously since graduation. In earnings regressions where we omitted the dummy variable for employment in a company with more than 1,000 employees, the coefficients on work experience attained significance.

[22] The t-value on the coefficient on the household tasks arrangement for Stanford men in the full-time earners regression is 0.127. In a regression for full-time Stanford men with no occupational dummy variables and no dummy variable for parental status (the only included variables being number of years of full-time work experience, number of years of part-time work experience, number of hours of paid work per week and the dummy variable does at least half of household tasks), the dummy variable for household tasks had a coefficient of -0.227, which was significant at the 1 percent level. For Stanford men in the all-earner sample, in a regression that included only work experience variables, hours worked

variables, and the dummy for household tasks, the coefficient on the household tasks variable was −0.244, significant at the 1 percent level. For the Stanford women, the coefficient on the household task dummy was not significant in this alternative specification. For the Todai men and women, the coefficient on the household task dummy variable was not significant in this alternative specification, nor in a specification including the occupational dummies and the parental status dummy, but excluding the company size dummy variables.

[23] An alternative explanation is that men gain when they do not deviate from the norm, while women are paid less no matter what they do.

[24] On the other hand, there has been some discussion in the press indicating that divorce over the division of household chores may be becoming more common in Japan. (See Ayako Sato 1996, as cited in Deborah Aoiki 1997: 99.)

[25] For a review of various views on this matter, see Stockman, Bonney, and Xuewen (1995: Ch. 9).

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