FAMILY HARMONY AND THE HOME

Bargaining Over Housework

The Frustrating Situation of Secondary Wage Earners

By Allen M. Parkman*

ABSTRACT. This paper investigates the limited increase in housework provided by husbands in response to higher earnings and labor force participation by their wives. An explanation is provided that integrates the time availability, relative resources, and gender ideology perspectives that traditionally have been used to explain housework decisions. The outcome is the result of a bargaining process in which two concerns are identified as limiting the response of primary wage earning spouses to the employment of secondary wage earning spouses. First, the secondary wage earners' employment may in part be motivated by a concern about the durability of their marriage rather than their family's welfare. Second, a balancing of the inconveniences and the net earnings of the additional employment may be viewed as making only a limited contribution to the family's welfare. Empirical results of an analysis of the individual household tasks imply that both gender ideology and the spouses' earnings are important in determining the hours that each spouse devotes to household tasks. When making decisions about the amount of housework to perform, both spouses respond to changes in relative earnings, but the response of husbands, who are usually the primary wage earners, is smaller than that of wives, who tend to be the secondary wage earners.

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Ι

Introduction

As MARRIED WOMEN HAVE ENTERED THE LABOR FORCE, their husbands have not assumed commensurate responsibilities in the home (Robinson and Godbey 1997; Bianchi, Milkie, Sayer, and Robinson 2000). The result has been the notorious "second shift" for married women (Hochschild and Machung 1989). Moreover, most men and women rate this arrangement as fair (Lennon and Rosenfield 1994; Coltrane 2000). It has been difficult to explain the behavior of men and women toward housework using the same theory. Exchange theory provides an explanation for the housework decisions of married women, as they tend to work less in the home as their earnings increase relative to their spouse (Brines 1994). The explanation for the behavior of husbands tends to be more complicated, with support for a combination of theories based on exchange theory and gender ideology (Brines 1994; Greenstein 2000).

In this paper, it is argued that the behavior of both married men and women can be explained by integrating the commonly accepted theories of housework. These theories can be viewed as complementary rather than competing. Two factors that influence housework are introduced that have been ignored in the prior literature. First is the effect of the shift from fault to no-fault grounds for divorce. Second is the effect of net earnings rather than gross earnings on decisions within families. An understanding of these factors helps to explain the limited response by primary wage earners, usually husbands, to the employment of their spouses, usually wives, and why couples tend to feel that the allocation of housework is fair.

In the next section, the theoretical perspectives on housework are reviewed and then integrated, with a special emphasis on the influences of unilateral, no-fault divorce and net earnings on bargaining within families. This analysis is used to generate hypotheses that are tested using data from the National Survey of Families and Households. The empirical analysis provides support for explanations for the housework decisions of both men and women based on this integrated framework.

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Theoretical Perspectives

Three theoretical perspectives on the allocation of housework dominate the literature (Bianchi, Milkie, Sayer, and Robinson 2000; Greenstein 2000). The time availability and the relative resources perspectives are based on exchange or microeconomic theories, while the gender perspective has its roots in sociology. The time availability perspective suggests that housework is rationally allocated based on the time available to the spouses (Coverman 1985: England and Farkas 1986; Hiller 1984; Shelton 1992). The relative resources perspective proposes that the allocation of housework between men and women is based on resources that they bring to their marriage, with education and income being particularly important (Blair and Lichter 1991; Ferree 1991; Kamo 1988). The gender ideologies perspective argues that gender influences how men and women identify themselves with regard to marital and family roles that have traditionally been linked to gender (Ferree 1990; Greenstein 1996; South and Spitze 1994; West and Zimmerman 1987). Housework does not have a neutral meaning; its performance by men and women in households defines and expresses gender relationships. Gender is used to explain why women tend to do the tasks that traditionally have been thought of as "women's work" (e.g., cooking, laundry, housecleaning), while men have primarily done "male" tasks (e.g., yard work and automobile maintenance) (Blair and Lichter 1991; Hiller and Philliber 1986; Kamo 1988; Presser 1994). The work traditionally done by women has been identified as more routine, less autonomous, less fulfilling, and more isolated than men's (Ross and Wright 1998), usually lacking a leisure component, and its doer having less discretion in deciding when it is completed (Meissner 1977).

An Integrated Perspective

A closer review of the analysis of family production initiated by Becker (1973, 1974) suggests that these perspectives are complementary rather than competing. When making decisions, people start out with a set of preexisting preferences, such as their gender

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ideologies, that interact with their constraints. The most obvious of those constraints are time and income. Changes that affect people's preferences, time, and income can alter their behavior. Preferences can be less flexible than the constraints, but all are subject to change. While attempts have been made to explain the allocation of housework based exclusively on time availability or relative resources, the impact of changes in time and resources on decisions should be analyzed incrementally based on adjustments in the cost and benefit of activities.

The period since World War II has witnessed dramatic changes in the preferences of individuals and their allocation of time and resources. As the earnings and opportunities available to women have increased, so has their labor force participation. For those women who work outside the home, the time available for household work has decreased, while their financial resources have increased. Any changes in their activities in the home also may be influenced by their values, of which their gender ideology will be important. As women, they may feel that maintaining a clean house is necessary. Now, they have to weigh that preference against an increased cost due to their more limited leisure and their higher income. They have an incentive to consider alternatives for their housework, such as a cleaning service or suggesting to their husbands—who also benefit from their higher income—that they assume some of the housecleaning responsibilities.

The actual amount and allocation of housework will be the result of a bargaining process between the spouses, which has been a topic of substantial interest to scholars. Becker (1973, 1974) presents the initial systematic economic analysis of the family, extending his earlier work on consumptive behavior, in which people use their time and income to produce commodities to maximize their utility (Becker 1965). In addition to the benefits of love and physical attraction that are fundamental to marriage, marriage permits people to increase their access to commodities relative to those available to them if they were single (Becker 1991). The production of these commodities benefits from increased specialization by the family members, which traditionally meant that women specialized in housework while men worked outside the home. Through specialization of labor, the individuals became more productive. Human capital was acquired by employment, and those working in the home generated marriagespecific capital. Becker's framework combines elements of both the time availability and relative resource perspectives, as both time and income are required for household production. The gender perspective is relevant, as decisions are made within an environment in which the spouses' preferences based on their gender ideologies are pertinent.

Within Becker's framework, the family's output is divisible, so that both spouses are better off than they would be if single. He uses altruism as a central force within the family, as the allocation of the gains from marriage is based on maximizing the household head's utility. This model assumes that a benevolent or altruistic decision maker has incentives to maximize the family's welfare. Modifications to this model occurred since it was recognized that it was not consistent with the standard economic model to attribute to a family a utility function that did not address the potentially conflicting utility preferences of the spouses. The recognition that altruism may not be a strong enough force to overcome the individual preferences within a family, along with the need to consider goods shared by the family members explicitly within the analysis of the family, led to new bargaining models. Manser and Brown (1980) and McElroy and Horney (1981) applied the Nash cooperative bargaining model to marriage. These authors propose that the Nash bargaining model determines the division of labor and potential gains from marriage, with the threat point being the dissolution of the marriage.

If it is recognized that outcomes during marriage are the result of a bargaining process, then the issue becomes whether this process is best viewed as a cooperative or noncooperative game with the fundamental difference between the two lying in the contracting possibilities. In cooperative games, binding contracts are possible, while in noncooperative games they are not. In this context, a noncooperative game perspective does not mean that the parties do not care about each other and want to reach an agreement, but rather that any agreement that they reach does not result in a legally enforceable contract. Initially, economic researchers considered cooperative games that assumed efficient outcomes because families form longterm relationships and the members, one hopes, tend to be sympathetic toward each other. Most authors who use a cooperative game framework to analyze the family ignore the legal limitations on and practical problems associated with binding contracts that control the spouses during marriage. While it has become easier to draft contracts dealing with the financial arrangements at divorce, courts continue to be very reluctant to enforce agreements dealing with ongoing marital relations. Moreover, even if courts would enforce these agreements, marital relationships are far too complicated to be defined with legal precision.

Marriage as a Noncooperative Game

Recognizing these limitations on binding contracts has led to marriage being modeled as a noncooperative game. Some authors have modeled the allocation within a family based on a threat point as a noncooperative Nash equilibrium (Woolley 1988; Konrad and Lommerud 1995). Lundberg and Pollak (1993, 1996) extend the bargaining model by arguing that marriage is a noncooperative game in which spouses revert to socially sanctioned gender roles-their separate spheres. An extension of this perspective would recognize that the "separate spheres" are not fixed but respond over time to changes in choices' costs and benefits. Couples want to increase their welfare in an environment in which they should recognize the reciprocity of their actions. The spouses' relative amounts of time and resources as well as their gender ideologies influence the outcome of their bargaining process. As their time becomes more valuable or they have access to more resources, we would expect them to bargain to shift housework to others. The extent of the shift will be influenced by their gender ideologies.

Additional Considerations

In this bargaining process, decisions have to be made about the amount of time each spouse will devote to housework and employment. The time allocated to housework will be influenced by two considerations that have not been addressed in the literature: the durability of the marriage and the net gain from employment. The durability of the marriage can be important when the benefits and the costs of housework are not simultaneous. A second concern is the net gain to a family when it weighs the potential deterioration in current housework against the gains from employment.

If couples believe that their marriage will last their joint lives, they can be less concerned about the timing of the costs and benefits of their decisions. Spouses' cost of providing housework, such as providing child care, can include both their immediate loss of income and the reduced investment that they make in their career that will later affect their income. The love, affection, and, potentially, income of their spouse for many years into the future as well as the children's love and affection provide the benefits from these services. If a marriage is perceived as long lasting, because of reciprocity each spouse has an incentive to consider all of the costs and benefits of choices. Employment, for example, would be pursued only so long as the benefits to all family members exceeded the costs.

Alternatively, if a divorce becomes more likely, the marriage becomes less durable and the spouses' incentives change. That is exactly what has happened in the United States. Marriage has become a less durable institution, as evidenced by the increase in the divorce rate during the past century. Contributing to the decline in the durability of marriage has been the shift from fault to no-fault divorce (Parkman 2000). During most of the history of the United States, it was difficult to obtain a divorce except with evidence of the fault divorce grounds of adultery, desertion, and cruelty. Increasingly, especially after World War II, divorces often were based on the mutual agreement of the spouses-although not necessarily amicably-to fabricate testimony to establish the fault grounds. The necessity of using perjury to obtain a divorce left many people uncomfortable. From 1969 to 1985, all the states either replaced the fault grounds with no-fault grounds such as incompatibility or irretrievable breakdown or added those no-fault grounds to the existing fault grounds. In effect, divorces changed from requiring mutual consent of both spouses to being available to either spouse unilaterally. While the grounds for divorce were changing, the other legal arrangements at divorce remained essentially unchanged. Limiting a career during

marriage, for example, was not the basis for adequate compensation if the marriage was dissolved.

Unilateral divorce increased the potential cost of an emphasis on housework while reducing the potential benefits. If a marriage is dissolved, the reduced investment in a career is potentially only costly to the spouse emphasizing housework. The potential for divorce will also limit the anticipated benefits from a relationship with the spouse and any children. In this environment, spouses would be expected to place more emphasis on employment and less on housework. If spouses decide to pursue employment in part because of concerns about their own welfare-as protection against the potential costs of divorce-rather than about the family members' welfare, their negotiating position changes. As spouses who traditionally emphasized housework, usually wives, increase their employment, their spouses, usually husbands, may be less willing to offer assistance in the home because they only had limited participation in or encouragement of their wives' decision to pursue employment. Meanwhile, wives may recognize that they are limited in their ability to reduce their household activities if they want to keep their spouse happy in the marriage. As a result, they will increase their employment more than they reduce their domestic labor.

An additional reason for the weak response by husbands to the employment of wives may be due to primary wage earners, more commonly husbands, finding themselves in a very different position than secondary wage earners, frequently wives, in their ability to increase their family's welfare through employment. Viewed incrementally, the primary wage earner is already in the labor force when the secondary wage earner enters. From the family's perspective, the benefit of the additional employment is access to more commodities with the cost being the deterioration in those already available. Most studies of the effect of spouses' earnings on their household activities use the spouses' gross earnings (Brines 1994; Greenstein 2000). Closer scrutiny suggests that a consideration of net earnings is much more relevant, with the ratio of net to gross earnings being frequently less for secondary wage earners than for primary wage earners. The notorious "marriage penalty" imposed on secondary wage earners is the most obvious example of the different situations in which spouses

find themselves. For couples that file their income taxes jointly, there are no exemptions or deductions available for the income earned by the secondary income earning spouse and, if the family's taxable income exceeds certain limits, it is subjected to a higher marginal tax rate. Secondary wage earners are also subjected to Social Security contributions that reduce their disposable income while having little effect on the spousal pension for which they have already qualified. Because higher income jobs tend to be associated with more generous fringe benefits, the primary wage earner may already have access to important benefits such as health insurance, and thus the employment of the secondary wage earner may not increase that element of the couple's compensation. While both parents are responsible for the care of their children, viewed incrementally the cost of child care has to be attributed to the employment of the secondary wage earner. Last, there are job-related costs and frustrations that reduce the net gains from employment for the family.

Some families, especially with a low income primary wage earner, receive substantial benefits from a secondary wage earner. This gain can be enhanced by the earned income credit. However, when the earned income credit is phased out, there is a dramatic increase in a couple's marginal tax rate. Still, the largest increase in the labor force participation rate for married women, who tend to be secondary wage earners, has been among wives with husbands who earn medium and higher incomes rather than among those from lower income house-holds (Bachu and O'Connell 2000; Juhn and Murphy 1997). Necessity, therefore, is a less appealing explanation for their employment. While exchange theory would predict that primary wage earners would assume more household tasks as the earnings of secondary wage earners increase, the effect may be limited because of the more limited effect of the secondary wage earners' net earnings on household welfare.

III

Testable Implications

IF HOUSEWORK IS THE RESULT OF A BARGAINING PROCESS in which spouses attempt to increase their welfare subject to time and income

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constraints and gender ideologies, specialization of labor suggests that the spouse with the higher income earning capacity will tend to focus on income earnings, while the other spouse focuses on housework. We also would expect that an increase in either spouse's relative earnings would reduce the time spent on household tasks. At the same time, we would also expect a more limited increase in husbands' housework as wives' gross earnings increase relative to their husbands'. First, wives may be perceived as having personal motives for working outside the home rather than doing it for the family's welfare. Second, the net benefit generated by wives' employment may not be perceived as having a more limited ability to increase the family's welfare. The response by husbands would be expected to be more limited for tasks that are perceived to be "women's work" such as washing dishes, cleaning house, and washing clothes than for other tasks such as working outdoors or driving.

The duration of the marriage is important, as the probability of divorce declines the longer a marriage lasts. Therefore, as the duration of the marriage increases, spouses would be expected to be more willing to increase their specialization, with the wives normally assuming more responsibility for housework. Another concern is the effect of a spouse's time devoted to a task. Specialization of labor suggests that as the hours devoted to a task by one spouse increase, the hours of the other should fall. However, if reciprocity is important, the hours devoted to a task by the spouses may be positively correlated for some tasks.

Preferences based on gender ideology still have a very important role in determining how couples allocate household tasks. We would, therefore, expect couples that hold more traditional views to allocate a larger share of the household tasks to the wife.

IV

Data and Measurement

The DATA USED IN THIS STUDY CAME FROM THE FIRST WAVE of the National Survey of Families and Households (NSFH), a sample of 13,017 adults interviewed in 1987 and 1988. In married-couple and cohabitating households, a questionnaire was also administered to the respon-

dent's spouse or partner. This study focuses on the married couples that provided usable responses for the nine household tasks covered by the survey. NSFH couple weights are used in all analyses to adjust for oversampling, differential probabilities of selection, and differential response rates. The variables used in the analysis are listed in Table 1.

Dependent Variables

The dependent variables in this study are the hours per week spent by each spouse on nine tasks: preparing meals, washing dishes, cleaning house, doing outdoor tasks, shopping, washing and ironing, paying bills, doing auto maintenance, and driving other household members to work or school. Four parties can undertake the tasks: the respondent, the spouse, a child, or others outside the home. For those who responded that they spent "some time" on the task but did not specify the time, the responses were recoded to one hour. Missing values from respondents and spouses were left missing, while the ones for children and others were recoded to zero because they were frequently missing and those that were recorded were usually small.

Independent Variables

Relative earnings: The variable used in this study to capture the effect of spouses' earnings on housework decisions is the log of the ratio of the spouses' gross earnings with own earnings divided by spouse's earnings. Other authors have used a variety of variables to capture the effect of income and earnings. Exchange and economic theories suggest that the specialization of labor within a household is based on the relative cost of the spouses' housework, with spouses reducing their domestic efforts as their earnings increase relative to their spouse's earnings. The preferred earnings measure would be the net earnings of the spouses, but its use is complicated by the wide variety of taxes and job-related costs facing couples, so gross earnings are used here. Because of the lower net income to gross income ratio for wives, it is anticipated that the coefficient for husbands will be less

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Variable	Definition			
Dependent Variable	es			
Meals	Hours Per Week Spent Preparing Meals			
Dishes	Hours Per Week Spent Washing Dishes			
Cleaning	Hours Per Week Spent Cleaning House			
Outdoors	Hours Per Week Spent on Outdoor Tasks			
Shopping	Hours Per Week Spent Shopping			
Washing	Hours Per Week Spent Washing and Ironing			
Bills	Hours Per Week Spent Paying Bills			
Auto	Hours Per Week Spent on Automobile			
	Maintenance			
Driving	Hours Per Week Spent Driving on Household			
	Tasks			
Independent Varial	bles			
Earnings	Log of Own Earnings Divided by Spouse's			
	Earnings			
Earnings Squared	Earnings Squared			
Duration	Duration of the Marriage (in Years)			
Age	Age in Years			
Black	1 if the Individual is African American			
Hispanic	1 if the Individual is Hispanic American			
Education	Number of Years of School Completed			
Children	Number of Children in the Household 18 Years			
	and Younger			
Children Squared	Children Squared			
Family Income	Log of Family Income			
Spouse's Hours	Hours Per Week by Spouse on Task			
Children's Hours	Hours Per Week by Children on Task			
Other's Hours	Hours Per Week by Others on Task			
Work	Hours Per Week Individual Worked Outside			
	the Home			

Variables Used in the Analysis

Variable	Definition			
Traditional	Response to Statement, with 1 Reflecting			
	Traditional Values and 5 Reflecting			
	Nontraditional Values			
SMSA	1 if the Individual Lives in a Standard			
	Metropolitan Statistical Area			
Northeast	1 if the Individual Lives in the Northeast			
South	1 if the Individual Lives in the South			
North Central	1 if the Individual Lives in the North Central			
Sample Size	13,007			

Table 1 Continued

than for wives. Since the ratio of one spouse's earnings to those of the other spouse can range from 0 to ∞ , a logarithmic transformation was made to the ratio to reduce the skewed distribution of the data. Because of the nonlinearity observed in other studies between earnings and time devoted to household tasks, the square of the logged ratio of the spouses' earnings is also included as an independent variable. It is anticipated that there will be a negative relationship between earnings ratios for both wives and husbands and hours devoted to a task, with the coefficient for husbands being less than that for wives.

Traditional Values: The gender ideologies of the spouses are important in determining their approach to housework, so a variable was introduced that reflected the spouses' views on traditional roles. Their values were gauged using their response to a survey statement, "It is much better for everyone if the man earns the main living and the woman takes care of the home and family." They could respond from strongly agree (1) to strongly disagree (5). The higher the response the less traditional are the values. More traditional values are expected to be associated with more housework by wives and less by husbands.

Other's Time: We are especially interested in the response of one

spouse to the efforts of the other spouse. In addition, we are concerned about the effect on time provided by children and others. Therefore, variables were introduced into each equation for the hours provided by the spouse, the children, and others. Specialization of labor suggests that the hours devoted to a task by a spouse should be negatively related to the hours devoted to that task by others.

Duration: The length of the marriage in years is also introduced as an independent variable. We expected more specialization of labor the longer the duration of the marriage.

Control Variables

Control variables were introduced for the spouse's age, ethnicity, education, how many hours per week that he or she worked outside the home, and where he or she lived. The log of the family's total income was also introduced. Since children are an important factor determining the amount of housework, a variable was introduced for the number of children in the household. Since there are potentially economies of scale in the tasks associated with children, children squared was introduced to capture that effect.

V

Empirical Results

Descriptive Statistics

The means of the variables used in this analysis are presented in Table 2. The typical marriage in the sample had lasted 13.6 years at the time the couple was interviewed. This is longer than the median duration of marriage until divorce in 1988, which was 7.1 years (U.S. Bureau of the Census 1995). Because wives were employed fewer hours than men and frequently at lower pay, as well as being more likely to not be working at all, the mean earnings of the wives (\$10,364) were substantially less than those of the husbands (\$27,982). The husbands were slightly older than the wives and had slightly more education. There were 1.2 children per family in the sample. Approximately three-quarters of the sample came from urban areas. Last, the hus-

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	Husband	Wife	
Duration of Marriage (years)		13.6	
Earnings	\$27,982		\$10,364
Age	39.6		37.1
Black	9.9%		10.1%
Hispanic	6.4%		7.2%
Education (in years)	13.0		12.8
Children		1.2	
Hours Employed Per Week	42.8		32.6
Metropolitan Area		73.3%	
Northeast		18.3%	
South		36.4%	
North Central		27.1%	
Traditional Score	2.6		2.8

Descriptive Statistics

bands and the wives were in the middle of the range of traditional values, with the wives being slightly less traditional than the husbands.

The mean number of hours spent by husbands, wives, children, and others for the nine tasks are presented in Table 3. These are the figures from the survey data. In many cases, data were missing for children and others. Therefore, in the regression analysis, the data are recoded by replacing missing values for children and others with 0. Overall, wives provide twice as many household services than do husbands with the biggest difference being the tasks traditionally viewed as "women's work": preparing meals, washing dishes, cleaning house, and washing and ironing.

Regression Analysis

The regression coefficients were estimated using the seemingly unrelated regressions (SUR) technique, which is appropriate for situations

Task	Husband	Wife	Children	Others
Preparing Meals	2.8	10.1	1.2	2.4
Washing Dishes	2.2	6.7	2.4	2.1
Cleaning House	2.2	8.9	2.3	2.6
Outdoor Tasks	5.3	2.4	1.5	1.5
Shopping	1.7	3.3	0.3	1.0
Washing, Ironing	0.8	4.6	0.8	1.5
Paying Bills	1.6	2.0	0.1	0.8
Auto Maintenance	1.9	0.3	0.2	0.9
Driving	1.4	1.7	0.3	0.8
Total	19.9	40	9.1	13.6

Table 3 Hours in Different Tasks

in which the error disturbances across comparable equations are assumed to be correlated because of the existence of unmeasured characteristics common to each model. In these analyses, it is assumed that there are immeasurable characteristics of the marriages and the households that are related to decisions about the household tasks. The primary advantage of the SUR technique in these analyses is that it allows for more efficient estimators of the parameters than does ordinary least squares (Griffiths, Hill, and Judge 1993).

Empirical Results

In reviewing the empirical results in Table 4, we are particularly interested in the spouse's earnings ratio and its square. We are also concerned about the relationship between the hours spent on an activity and the duration of the marriage, the amount of time spent on that activity by the other spouse, and the effect of traditional values.

Overall, these results support the analysis presented here. The coefficients of the earnings variables are negative for all the tasks traditionally categorized as women's work: preparing meals, washing dishes, cleaning house, and washing and ironing. In five cases, they

	Preparir	ng Meals	Washing	g Dishes
	Wives	Husbands	Wives	Husbands
Intercept	16.820***	5.159**	11.056***	-1.982
-	(3.133)	(1.629)	(2.388)	(1.521)
Earnings	-0.514**	-0.178	-0.449**	-0.235*
	(0.199)	(0.102)	(0.156)	(0.097)
Earnings Squared	0.023	0.020	0.027	0.003
	(0.050)	(0.026)	(0.038)	(0.024)
Duration	0.032	-0.021	0.066**	-0.029*
	(0.028)	(0.013)	(0.021)	(0.012)
Age	0.018	-0.008	-0.056*	0.014
	(0.031)	(0.013)	(0.023)	(0.012)
Black	0.405	0.392	-0.948	0.786*
	(0.696)	(0.345)	(0.549)	(0.330)
Hispanic	-0.178	-0.031	0.241	-0.076
	(0.875)	(0.461)	(0.621)	(0.396)
Education	-0.156*	0.078*	-0.203***	0.092**
	(0.076)	(0.034)	(0.054)	(0.030)
Children	0.797*	0.065	0.071	-0.009
	(0.375)	(0.193)	(0.292)	(0.184)
Children Squared	-0.085	-0.032	-0.012	-0.013
	(0.106)	(0.055)	(0.083)	(0.053)
Family Income	-0.730*	-0.216	-0.330	0.055
	(0.313)	(0.166)	(0.245)	(0.152)
Spouse's Hours	0.299***	0.083***	1.157***	0.461***
	(0.048)	(0.013)	(0.033)	(0.013)
Children's Hours	0.391***	0.173**	0.028	0.072
	(0.105)	(0.054)	(0.065)	(0.041)
Others' Hours	-0.059	0.085	0.391**	-0.202*
	(0.123)	(0.064)	(0.146)	(0.092)
Work	-0.045***	-0.037***	-0.017	-0.020***
	(0.013)	(0.007)	(0.009)	(0.006)
Traditional	-0.172	0.219**	-0.122	0.198**
	(0.142)	(0.078)	(0.101)	(0.067)

Table 4

	Preparing Meals		Washing Dishes	
	Wives	Husbands	Wives	Husbands
SMSA	0.364	0.076	-0.547	0.344
	(0.408)	(0.212)	(0.314)	(0.199)
Northeast	0.464	-0.423	0.224	0.072
	(0.538)	(0.278)	(0.411)	(0.260)
South	0.616	-0.539*	0.725*	-0.502*
	(0.476)	(0.245)	(0.369)	(0.232)
North Central	0.596	-0.456*	0.765*	-0.401
	(0.476)	(0.245)	(0.368)	(0.232)
Ν	1,635	1,635	1,587	1,587
Adjusted R^2	0.	083	0.548	

Table 4 Continued

 $p \le 0.05 \ p \le 0.01 \ p \le 0.01 \ (two-tailed tests).$

Note: Standard errors are in parentheses.

	Cleaning House		Outdo	or Tasks
	Wives	Husbands	Wives	Husbands
Intercept	18.508***	2.231	2.861*	-2.878
-	(2.966)	(1.467)	(1.324)	(2.483)
Earnings	-0.736***	-0.121	-0.060	0.013
0	(0.174)	(0.085)	(0.084)	(0.156)
Earnings Squared	-0.047	0.005	-0.030	0.064
	(0.043)	(0.021)	(0.021)	(0.039)
Duration	0.088**	-0.028*	-0.004	-0.001
	(0.027)	(0.012)	(0.012)	(0.020)
Age	-0.083**	-0.001	0.009	-0.039
0	(0.029)	(0.012)	(0.013)	(0.020)
Black	-0.195	0.693*	-0.896**	1.494**
	(0.685)	(0.320)	(0.302)	(0.537)
Hispanic	-0.396	0.099	0.282	-0.391
-	(0.814)	(0.402)	(0.353)	(0.675)

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	Cleanin	g House	Outdoo	Outdoor Tasks	
	Wives	Husbands	Wives	Husbands	
Education	-0.291***	0.025	-0.003	-0.052	
	(0.071)	(0.030)	(0.031)	(0.049)	
Children	0.513	-0.358*	-0.144	0.241	
	(0.360)	(0.174)	(0.160)	(0.297)	
Children Squared	-0.098	0.103*	-0.002	-0.057	
	(0.101)	(0.049)	(0.045)	(0.083)	
Family Income	-0.663*	-0.020	-0.191	0.713**	
	(0.306)	(0.148)	(0.136)	(0.252)	
Spouse's Hours	1.021***	0.243***	0.357***	1.234***	
	(0.048)	(0.011)	(0.012)	(0.040)	
Children's Hours	0.716***	-0.076	0.191***	0.202*	
	(0.083)	(0.041)	(0.052)	(0.097)	
Others' Hours	-0.074	0.026	0.483***	-0.413*	
	(0.110)	(0.053)	(0.091)	(0.172)	
Work	-0.046***	-0.038***	-0.011^{*}	-0.018	
	(0.012)	(0.006)	(0.005)	(0.010)	
Traditional	-0.231	0.150*	-0.054	-0.012	
	(0.132)	(0.069)	(0.057)	(0.114)	
SMSA	0.393	0.074	-0.353*	0.301	
	(0.392)	(0.193)	(0.175)	(0.329)	
Northeast	0.680	-0.358	-0.238	0.631	
	(0.516)	(0.252)	(0.230)	(0.431)	
South	0.508	-0.406	-0.180	0.089	
	(0.456)	(0.222)	(0.204)	(0.380)	
North Central	0.509	-0.556*	0.056	0.034	
	(0.460)	(0.221)	(0.205)	(0.381)	
Ν	1,592	1,592	1,610	1,610	
Adjusted R^2	0.3	331	0.4	494	

Table 4 Continued

 $p \le 0.05 \ p \le 0.01 \ p \le 0.001 \ (two-tailed tests).$ Note: Standard errors are in parentheses.

	Shopping		Washing	Washing, Ironing	
	Wives	Husbands	Wives	Husbands	
Intercept	0.198	1.464	12.959***	2.041***	
	(1.820)	(0.971)	(2.176)	(0.713)	
Earnings	-0.479***	-0.224***	-0.244	-0.152***	
	(0.105)	(0.056)	(0.125)	(0.040)	
Earnings Squared	-0.040	0.021	-0.013	0.026**	
	(0.025)	(0.014)	(0.030)	(0.010)	
Duration	0.047**	-0.024^{**}	-0.003	-0.013*	
	(0.017)	(0.008)	(0.019)	(0.006)	
Age	-0.037*	0.020**	-0.027	-0.003	
	(0.017)	(0.008)	(0.021)	(0.006)	
Black	0.506	0.042	0.442	0.329*	
	(0.412)	(0.211)	(0.491)	(0.152)	
Hispanic	-0.152	0.436	-0.898	0.445*	
	(0.456)	(0.247)	(0.599)	(0.197)	
Education	-0.051	0.022	-0.101	0.049***	
	(0.040)	(0.019)	(0.053)	(0.015)	
Children	-0.141	0.157	0.667**	-0.047	
	(0.219)	(0.116)	(0.262)	(0.085)	
Children Squared	0.032	-0.044	-0.044	0.018	
	(0.063)	(0.034)	(0.076)	(0.025)	
Family Income	0.220	-0.172	-0.659**	-0.179*	
	(0.187)	(0.099)	(0.225)	(0.072)	
Spouse's Hours	1.375***	0.397***	0.074	-0.006	
	(0.039)	(0.011)	(0.079)	(0.008)	
Children's Hours	0.205	0.066	0.818***	0.165***	
	(0.147)	(0.078)	(0.057)	(0.019)	
Others' Hours	0.115	-0.054	1.121***	-0.021	
	(0.209)	(0.113)	(0.133)	(0.044)	
Work	-0.006	-0.010^{*}	-0.012	-0.001	
	(0.007)	(0.004)	(0.009)	(0.003)	
Traditional	-0.021	0.070	0.074	0.102**	
	(0.075)	(0.043)	(0.098)	(0.034)	

Table 4 Continued

	Shopping		Washing, Ironing		
	Wives	Husbands	Wives	Husbands	
SMSA	-0.109	0.136	0.039	-0.026	
	(0.238)	(0.128)	(0.287)	(0.093)	
Northeast	0.452	-0.203	0.660	-0.137	
	(0.314)	(0.168)	(0.370)	(0.120)	
South	0.289	-0.172	-0.239	0.018	
	(0.279)	(0.149)	(0.328)	(0.107)	
North Central	0.004	0.017	-0.270	0.086	
	(0.280)	(0.149)	(0.330)	(0.107)	
Ν	1,595	1,595	1,528	1,528	
Adjusted R^2	0.	560	0.	0.158	

Table 4 Continued

 $p \le 0.05 \ p \le 0.01 \ p \le 0.01 \ (two-tailed tests).$

Note: Standard errors are in parentheses.

	Paying Bills		Auto Maintenance	
	Wives	Husbands	Wives	Husbands
Intercept	1.882	-0.566	-1.390**	4.863**
	(1.669)	(1.439)	(0.489)	(1.570)
Earnings	-0.106	0.100	0.049	0.087
	(0.109)	(0.092)	(0.032)	(0.102)
Earnings Squared	0.011	-0.031	-0.002	0.003
	(0.027)	(0.023)	(0.008)	(0.025)
Duration	0.007	-0.006	-0.004	0.014
	(0.015)	(0.011)	(0.004)	(0.013)
Age	-0.021	0.001	0.001	-0.021
0	(0.016)	(0.011)	(0.005)	(0.013)
Black	0.804*	0.627	-0.159	1.263***
	(0.390)	(0.320)	(0.113)	(0.345)

	Paying Bills		Auto Maintenance		
	Wives	Husbands	Wives	Husbands	
Hispanic	0.666	1.118**	-0.001	1.117**	
-	(0.469)	(0.399)	(0.135)	(0.432)	
Education	-0.067	0.033	0.009	-0.088**	
	(0.040)	(0.031)	(0.012)	(0.033)	
Children	0.023	0.267	0.023	0.036	
	(0.200)	(0.171)	(0.059)	(0.190)	
Children Squared	0.018	-0.071	-0.003	-0.002	
	(0.057)	(0.049)	(0.017)	(0.054)	
Family Income	0.002	0.059	0.134**	-0.197	
	(0.171)	(0.146)	(0.051)	(0.161)	
Spouse's Hours	0.158***	0.117***	0.141***	1.443***	
-	(0.030)	(0.022)	(0.007)	(0.078)	
Children's Hours	-0.938	0.366	-0.040	0.239	
	(1.228)	(1.053)	(0.055)	(0.177)	
Others' Hours	0.482	-0.094	-0.094	0.704***	
	(0.407)	(0.350)	(0.053)	(0.170)	
Work	0.007	0.006	-0.004	0.008	
	(0.007)	(0.006)	(0.002)	(0.007)	
Traditional	0.166*	0.022	-0.036	-0.007	
	(0.077)	(0.070)	(0.022)	(0.075)	
SMSA	-0.237	0.080	-0.009	0.077	
	(0.219)	(0.190)	(0.064)	(0.208)	
Northeast	0.534	-0.101	0.093	0.013	
	(0.286)	(0.247)	(0.084)	(0.271)	
South	0.240	-0.002	0.073	-0.027	
	(0.257)	(0.221)	(0.075)	(0.241)	
North Central	0.065	0.152	0.074	-0.241	
	(0.258)	(0.221)	(0.076)	(0.243)	
Ν	1,544	1,544	1,527	1,527	
Adjusted R^2	0.0	0.035		0.229	

Table 4 Continued

 $p \le 0.05 p \le 0.01 p \le 0.01 p \le 0.001$ (two-tailed tests). *Note:* Standard errors are in parentheses.

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	Driv	ving
	Wives	Husbands
Intercept	-0.535	1.462
	(1.187)	(1.033)
Earnings	-0.156*	-0.205**
	(0.076)	(0.065)
Earnings Squared	-0.008	-0.004
	(0.019)	(0.016)
Duration	0.016	-0.002
	(0.010)	(0.008)
Age	-0.016	0.004
-	(0.011)	(0.008)
Black	0.344	0.271
	(0.268)	(0.220)
Hispanic	-0.019	0.923***
•	(0.311)	(0.275)
Education	0.069**	-0.035
	(0.027)	(0.020)
Children	0.784***	-0.076
	(0.141)	(0.124)
Children Squared	-0.065	-0.006
-	(0.040)	(0.034)
Family Income	-0.026	-0.054
	(0.122)	(0.105)
Spouse's Hours	0.761***	0.573***
-	(0.025)	(0.018)
Children's Hours	-0.233	0.274*
	(0.144)	(0.125)
Others' Hours	-0.058	0.129
	(0.089)	(0.077)
Work	-0.003	0.003
	(0.004)	(0.004)
Traditional	-0.003	0.008
	(0.050)	(0.046)

Table 4 Continued

	Dri	ving
	Wives	Husbands
SMSA	0.148	0.058
	(0.154)	(0.135)
Northeast	0.221	-0.045
	(0.201)	(0.176)
South	0.203	0.087
	(0.178)	(0.155)
North Central	-0.210	0.251
	(0.178)	(0.155)
Ν	1,671	1,671
Adjusted R^2	0.5	515

Table 4 Continued

 $p \le 0.05 \ p \le 0.01 \ p \le 0.001 \ (two-tailed tests).$

Note: Standard errors are in parentheses.

are statistically significant at $p \le 0.05$, and in two more cases they are significant at the weaker $p \le 0.1$. In all of these cases, the coefficient for the husbands is much smaller than for the wives. Meanwhile, in only one case is the coefficient of the earnings squared term significant, and in that case it is positive. Generally, wives devote more time and husbands devote less time to a task as the duration of the marriage increases or if they have traditional values. A somewhat surprising result is the positive relationship between the hours devoted to tasks by spouses. The results for each task are next discussed in more detail.

Preparing Meals: Preparing meals has traditionally been viewed as women's work. Still, for both spouses there are negative relationships between their earnings ratio and the number of hours that they spend preparing meals. For women it is statistically significant at $p \le 0.01$, while for husbands it is only statistically significant at the weaker $p \le 0.1$ level. It is particularly noteworthy that in this regression and in other regressions for tasks that are usually treated as women's work, the coefficient for the husbands is much smaller than for the

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wives. In this equation, the wives' coefficient is -0.514, while that for the husbands is -0.178. So while husbands are reacting to the change in the spouses' gross earnings, they may perceive that the change in their net income is less than the change in their gross income. Their response is smaller than that of their wives. In addition, both increase their hours on this task as their spouse does the same thing. This positive relationship between the hours spent by the spouses in a given task occurs regularly in the other estimated equations. Since there frequently is a statistically significant positive relationship between the hours devoted to a task by a spouse and those of the other spouse and children, the data may be biased by some respondents being overly generous in the hours reported in the NSFH for other family members. Among the other independent variables, women spend more time and men spend less time on this task the more traditional their values. Only the husbands' coefficient is statistically significant.

Washing Dishes: Washing dishes has also traditionally been viewed as women's work. For both spouses there are statistically significant negative relationships between their earnings ratios and the hours that they spend washing dishes, with the husbands' coefficient being approximately half that of the wives'. The longer the duration of the marriage the more hours that wives devote to this task and the fewer are devoted to it by husbands. Both spouses spend more time washing dishes as their spouse does the same thing. Traditional values continue to have the predicted effects on men and women, although only the husbands' coefficient is statistically significant.

Cleaning House: This is another task usually assumed to be women's work. Both husbands and wives reduce the time spent on this activity as their earnings ratios increase, although only the wives' coefficient is statistically significant. The husbands' coefficient is approximately a fifth of the wives'. The longer the marriage the more time that wives devote to this task and the less that is devoted to it by husbands. Wives increase their hours spent on this activity as the hours spent on it by their husband and children increase. Traditional values continue to have the predicted effects, although only the husbands' coefficient is statistically significant.

Outdoor Tasks: Outdoor tasks cover a variety of activities, many of

which are commonly perceived to be more flexible and enjoyable than the above tasks. Neither the earnings ratios nor the traditional values are statistically significant. Still, both spouses spent more time on this task as the time spent on it by their spouse increased.

Shopping: While shopping can entail a range of activities, some pleasant and others unpleasant, these results suggest that spouses reduce their hours on it as their earnings ratios increase. The longer the marriage the more time that wives devote to this task and the less that is devoted to it by husbands. The time spent by one spouse continues to be positively correlated with the time spent by the other spouse. Traditional values continue to have the predicted effects, although only the husbands' coefficient is statistically significant.

Washing and Ironing: Turning again to an activity that is usually treated as women's work, we return to a pattern observed above. Both spouses reduce their hours in this activity as their earnings ratio increases, and husbands are less responsive than are wives. The coefficient for husbands is statistically significant at $p \leq 0.001$, while the coefficient for wives is only significant at the weaker $p \leq 0.1$ level. The squared earnings ratio term for husbands is statistically significant and positive in contrast to the negative squared term observed in the studies based on dependency (Brines 1994; Greenstein 2000). The longer the marriage the less time that both wives and husbands devote to this task, although only the husbands' coefficient is statistically significant. Traditional values result in less time spent on this activity by both women and men, although only the husbands' coefficient is statistically significant.

Paying Bills: The spouse's earnings ratios do not have a significant effect on this task, although it is reported that the effort of the spouses on this task is positively correlated. It is noteworthy that wives with less traditional values devote more time to this task.

Automobile Maintenance: This equation produced unexpected results, as the earnings coefficients for both wives and husbands were positive, but not statistically significant. Since the question is open ended, some respondents may be reporting the hours that they spend taking the car in for auto maintenance rather than just working on it. Again, it is reported that each spouse spends more time on this task as the other spouse does the same thing.

Driving: Both spouses devote fewer hours to driving as their

earnings ratios increase. This is the one set of statistically significant coefficients for which the husbands' coefficient is larger than that of the wives. Again, the relationship between the hours devoted to it by the spouses is positively correlated. The hours devoted to this task do not appear to be influenced by traditional values.

VI

Conclusion

THIS PAPER PROVIDES AN EXPLANATION OF WHY HUSBANDS, who are usually primary wage earners, only make a small increase in their housework when the employment of their wives, who are usually secondary wage earners, increases. It is argued that the time availability, relative resources, and gender ideology perspectives are complementary rather than competing theories to explain the housework decisions of spouses. Family members benefit from the consumption of commodities, the production of which requires time and income. It is suggested here that the commodities produced are the result of a bargaining process. Exchange theory suggests that the time and resources available to spouses strongly influence the time that they devote to household tasks. Also influencing the bargaining process is gender ideology. Two concerns may limit the response of primary income earning spouses to their spouse's employment. First, the secondary wage earners' employment may in part be motivated by a concern about the durability of the marriage rather than the family's welfare. Second, a balancing of the inconveniences and the net earnings of the additional wage earners' employment may not be viewed as only making a limited contribution to their family's welfare. For these reasons, husbands respond to their wives' employment, but their response can be modest. To the extent that spouses recognize their motives for and limited net benefits from employment, they may view the outcome as fair.

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