

The Effects of the Great Recession on Bargaining Power within Marriages

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Abstract

This study examines the effect of recession-induced differential changes in men's and women's unemployment rates on the distribution of bargaining power within marriages. While marital bargaining power is the outcome of interest, it operates within the black box of family decision-making and cannot be directly observed. Instead, we use changes in family demand for goods and services to signal changes in the distribution of power between husbands and wives. We first differentiate expenditure patterns that appear "male-driven" from those that appear "female-driven" to allow inferences about the direction of changes in bargaining power from changes in family demand. We then utilize recession-induced variation in the unemployment rates of men and women over time and across states to identify and estimate the differential effects of the recession on the marital bargaining power of women. We estimate a 1.95 percentage point decrease in the male bias in consumption among families living in states where women's relative economic opportunities improved when compared to men's. We find that the magnitude of this effect is even stronger for women in low-income families, women with young children, and African-American and Hispanic women. These findings suggest one byproduct of the Great Recession was an increase in women's marital bargaining power, especially for those women who are most vulnerable. Whether these effects will sustain through the recovery period remains to be seen.

I. Introduction

The media and researchers alike have referred to the Great Recession as a “Mancession.” Although women did experience substantial job losses during the recession, by many measures the recession hit men harder than women. Engemann and Wall (2010) reported that men accounted for more than 75 percent of the net job losses that occurred between December 2007 and June 2009. In families in which husband’s lost work, recent research points to a compensatory increase in wife’s labor supply. Using the Current Population Survey, Smith and Mattingly (2010) estimated a stronger response during the recession than in the prior period. Similar work by Starr (2014), using American Community Survey data, finds additional evidence of an increase in wives’ labor supply in families in which husbands became unemployed during the recession.

Nationally, we observe that men’s unemployment rates increase rapidly relative to women’s during the first three years of the recession. Figure 1 shows the patterns in unemployment by gender through the period and summarizes patterns using a measure of the gender gap in unemployment rates. At the onset of the recession in 2007, there was little difference between the unemployment rates of men and women, on average. By 2010, women’s unemployment had almost doubled, at 8.6 percent. However, men’s unemployment had risen even further, to a recessionary peak of 10.5 percent. Sahin, Song, and Hobijn (2010) show that one reason for this differential change in unemployment was that the sectors that the recession hurt the most were predominantly male. While economic opportunities declined across the board, the evidence suggesting opportunities declined more for men than for women complicates the interpretation of the effect of the recession on well-being. Under these conditions, women may

have experienced a decline in overall household resources paired with an increase in their allocation of those resources.

Theory of bargaining within marriage

Economic theories of the family have developed over time to predict and explain how changes in the environment outside the family may impact household decision-making. Early models of the family assume family members share the same preferences or have completely interdependent utilities (Samuelson 1956; Becker 1974, 1981). These models are categorized as common preference models because they assume that once married, partners drop their market-oriented selves at the threshold of the home and jointly maximize a single utility function relative to the family budget constraint, allowing for easy incorporation of the family into previously existing models of individual behavior. This assumption also suggests that family demand will not change in response to changes in the relative incomes of partners or their relative positions outside marriage.

If we weaken the assumption that partners either share the same preferences or behave altruistically toward one another, we allow for individual utility functions to persist in the context of the family. A second set of models, game-theoretic bargaining models, assume husbands and wives behave as individuals with distinct preferences and bargain with each other to maximize their individual utilities within marriage (Manser and Brown 1980; McElroy and Horney 1981). These models do not preclude utility interdependence, but assume partners will bargain with each other to the extent that interdependence is incomplete. Under this assumption, shifts in the relative ownership of income would likely induce observable changes in family demand.

Bargaining models have evolved to incorporate relative utilities in divorce as ultimate threat-points—boundaries to the marital negotiation process—from which partners negotiate for shares of the marital gains. According to bargaining theory, if the marital allocation is such that either partner receives less in marriage than he or she expects to receive in divorce and marital negotiation fails to produce a reallocation, then that partner will initiate divorce. Those partners with high threat points (high-value exit alternatives to marriage) are likely to have greater marital bargaining power than those with relatively low threat points (low-value exit alternatives to marriage). In those couples that do not share preferences for an egalitarian distribution, higher bargaining power translates into a larger share of the marital gains, which may include greater resource allocation or more leisure time. While sharing rules may be established at the time of marriage, relative threat points will likely change over time as circumstances within and outside the marriage change, resulting in reallocations.

In the context of the Great Recession, bargaining theory suggests that the distribution of bargaining power within families may be affected by changes in marital partners' relative economic opportunities. If economic opportunities equal for men and women—that is, for example, unemployment rates increase by similar amount for both groups—then we would not expect to see a shift in bargaining power within marriage. However, if we were to observe differential changes in unemployment rates by gender, as we have during the Great Recession—or “Mancession,” then we would expect this change in the external environment to induce changes in the distribution of marital bargaining power. Based on the empirical literature discussed below, we expect to observe such changes through changes in family demand.

Empirical tests of marital bargaining theory

Bargaining models suggest that changes in structural factors—anything that alters marital partners' relative expectations of utility in divorce—will produce observable changes in family expenditure patterns. This prediction provides an opportunity to empirically test how well bargaining models explain behavior.

Two key studies have found important differences in family demand depending on the relative ownership of wage income. Browning and colleagues (1994) use Canadian Expenditure Survey data from 1978-1986 to estimate the effect of relative income ownership on the family consumption of men's clothing and women's clothing. They find changes in individual incomes matter for husbands and wives in a way that is distinct from the effect of additional income on the expenditures of single adults. Phipps and Burton (1998) push this model a bit further to consider additional categories of expenditure. They also use Canadian Expenditure Survey data (collected a decade later in 1992) to test the effects of differences in relative income on family demand. They find that when the husband's income is relatively higher, family demand is higher for men's clothing, transportation stock goods, and transportation flow goods; when the wife's income is higher, family demand is higher for women's clothing, children's clothing, childcare, and restaurant meals. These findings suggest bargaining models of family behavior have stronger explanatory power than common preferences models.

A number of additional studies have used alternative factors—including changes in the ownership of non-wage income (Schultz 1990; Thomas 1990; Klawon and Tienfenthaler 2001), changes in divorce policies (Gray 1998; Chiappori et al. 2002; Rangel 2006), and changes in redistributive policies (Lundberg, Pollak, and Wales 1997; Duflo 2003; Bobonis 2009)—to test for evidence of a relationship between the structural environment outside of marriage and

bargaining power within marriage. These studies provide strong empirical evidence in support of bargaining models.

The underlying theoretical framework of this paper relies on a bargaining model of the family and the empirical evidence that shifts in bargaining power show up as changes in family expenditure patterns. We apply this framework to an analysis of the effects of how gendered changes in unemployment rates induced by the Great Recession affect marital bargaining power. Given the characterization as the “Mancession,” the literature suggests bargaining power would generally increase for women over this period. However, we can expect the largest shifts in bargaining power among families living in states that experienced the largest relative changes in male and female unemployment rates.

II. Data

We use two sources of data in this analysis. First, we use Local Area Unemployment Statistics at the state level from the Bureau of Labor Statistics to characterize changes in male and female unemployment rates over the recessionary period. These data show that, on average, the male unemployment rate increased relative to female rate over the period (see Figure 1). While there was not a single state in which female unemployment increased relative to male unemployment over the period, we do see substantial variation across states in the degree to which recession-induced increases in male unemployment outpaced increases in female unemployment. Table 1 presents unemployment rates by gender and state for the period 2007-2010.¹ In the last column, the author’s calculate a measure of the increase in the gender unemployment gap for each state. A positive “change in gap” reflects a relative increase in male unemployment when compared with the change in female unemployment over the recessionary

¹ Note, only 40 states and the District of Columbia are included in the analysis due to sample size restrictions in the Consumer Expenditure Survey data.

period. There was not a single state in which this measure declines, but in Louisiana we observe no change in the percentage point gap between male and female unemployment rates—both increased by 3.6 percentage points over the period. In contrast, Michigan experiences a large, positive change in the unemployment rate gap—while the male unemployment rate more than doubled (from 7.0 percent to 14.3 percent), the female unemployment rate increase 2.8 percentage points to reach 9.9 percent by 2010, representing a reversal. Table 1 sorts states based on the size of the change in the male-female unemployment gap. The top third of states—those with changes in the gap of more than 2 percentage points—are characterized as “high-change” states. In our later analysis, we will estimate the differential change in expenditure patterns for married couples living in high-change states relative to those living in all other states.

Our second source of data is the Consumer Expenditure Survey (CES). These data allow us to observe family expenditure patterns over the period of the Great Recession. We use households headed by single adults (15,179) in the sample to identify gendered expenditure patterns. We then later use a married couple subset (7,960) that includes a pre-recessionary cohort (2006-2007) and a post-recessionary cohort (2010-2011) to estimate the effect of the recession on the expenditure patterns.² Table 2 details the characteristics of these two groups by gender. Consistent with common expectations, married individuals tend to be older, more likely to have children, more likely to have a higher degree, and less likely to live in poverty than single household heads. These are differences we will address, to the extent possible, in our analysis.

² We limit the analysis at both stages to households headed by adults aged 18 to 50 who are neither retired nor enrolled in higher education.

III. Methodology

While marital bargaining power is the outcome of interest, it operates within the black box of family decision-making and cannot be directly observed. Instead, we use changes in family demand for goods and services to signal changes in the distribution of power between husbands and wives. To carry out this analysis, we first use expenditure data from households headed by single adults to differentiate expenditure patterns that appear “male-driven” from those that appear “female-driven” to allow inferences about the direction of changes in bargaining power from changes in family demand. We then use data capturing the expenditure patterns of married couples across states and over the recessionary period to identify and estimate the differential effect of the recession on changes in expenditure patterns, an indicator of changes marital bargaining power.

Differentiating gendered expenditure patterns

Given that expenditures are jointly-determined in married couples, we cannot infer gendered patterns from the sample of married couples. Instead, we use the sample of single adults to reveal gendered patterns of expenditures, while recognizing that the characteristics of single adults likely vary in observed and unobserved ways from those of married adults. In the first stage of this analysis, we control for observed differences in characteristics between single adult men and women in the sample. Equation (1) shows the regression model used to estimate the relationship between gender and each of the following expenditure categories: home meals, restaurant meals, alcohol and tobacco, housing, household services, vehicles and transportation, education, health care, entertainment, men’s clothing, women’s clothing, children’s clothing, insurance and savings/investment contributions.

$$(1) \text{ExpShare}_j = \beta_0 + \delta_0 \text{male} + \beta_k X_{ik} + \mu$$

We regress each category of expenditure on gender, as well as variables representing age, race and ethnicity, education level, income as a percent of the poverty line, presence and age of children, and urbanicity. We find that men devote significantly higher proportions of their total expenditures to restaurant meals, alcohol and tobacco, vehicles and transportation, entertainment, men's clothing, insurance and savings/investment contributions. The results from these regressions are presented in Table 3. In contrast, men devote significantly smaller shares of their total expenditures to home meals, housing, household services, health care, women's clothing and children's clothing. The results from these regressions are presented in Table 4.

The findings are consistent with the expenditure categories assigned to married men and women by Phipps and Burton (1998). They are also consistent with the positive association in the literature between women's control over resources and spending on women's and children's clothing (Lundberg, Pollack, and Wales 1997; Bobonis 2009) and health care (Thomas 1990; Duflo 2003). We then use these categories to create two summary categories—those consumption categories that are more likely to be “male-driven” and those categories that are more likely to be “female-drive” on average. Using these summary categories, we perform a series of test. First, we test the relationship between gender and summary categories to confirm our findings (see Table 5, columns 1 and 4). With that confirmation, we test these summary categories for potential bias due to selection into marriage. We limit the subsample in the following three ways: to those who have been married or are currently married, but living separately; those who have been widowed; and those single adults with young children. As shown in Table 5, the findings persist through these tests, suggesting the relationship between gender and expenditures hold across household types that look more similar to married couples.

We therefore draw on these categories to construct an indicator of what we refer to as the “male bias” in consumption. We use this indicator as the outcome measure main analysis.

Estimating the effect of recession-induced changes in unemployment on bargaining power

We use the male bias indicator described above to estimate the effect of a change in the external environment—an increase in the gender gap in unemployment—on the distribution of bargaining power between husbands and wives. Bargaining theory suggests we should observe relative increases in the marital bargaining power of women in those states in which male unemployment levels increase a lot relative to female unemployment levels over the recessionary period. If theory is correct, we should expect to see a differential decline in the male bias in high-change states relative to other states.³

Using the model shown below (2), we regress our male bias indicator on the high-change state indicator, the post-period indicator, the interaction between high-change states and post-period, and a full set of controls, including the age, race, and education levels of the husband and the wife, poverty level, presence of young children, family size, and urbanicity.

$$(2) \text{ male bias} = \beta_0 + \delta_0 \text{highgap} + \beta_1 \text{post} + \delta_1 \text{highgap} * \text{post} + \beta_k X_{ik} + \mu$$

The coefficient on the interaction term (δ_1) is our difference-in-differences estimator. If there was a differential decrease in the male bias in family expenditure among families living in high-change states over the recessionary period, we would expect δ_1 to be negative and significant. Put another way, an estimated negative effect on male bias indicates that relative improvements in women’s economic opportunities led to a shift in household expenditures toward female-driven goods, reflecting an increase in the relative bargaining power of wives.

³ Note, we use state level rather than individual level unemployment rates, as employment is arguably endogenous to the distribution of marital bargaining power. Instead, we estimate the effect of changes in the external environment, arguably exogenous, on the intra-family distribution of bargaining power.

IV. Findings

We find evidence of substantial and significant differential declines in the male bias for families living in high-change states relative to families living in other states over the recessionary period. We estimate the male bias in family demand decreased by 1.95 percentage points for families living in environments where women's economic opportunities improved relative to men's during the great recession (see Table 6). We also estimate this effect for subgroups of interest. We find evidence that this effect is even stronger among particularly vulnerable groups of married women. For those living in low-income families, we estimate a decline of 7.03 percentage points in the male bias; for those with young children, we estimate similar decline of 5.69 percentage points. When we restrict the sample to African-American women, we estimate a 5.56 percentage point decline, but this estimate is marginally significant; our findings are similar for Hispanic women.

Taken together, these findings suggest understanding the effects of a change in the economic environment on individual well-being becomes more complex when we consider the intermediary role of household bargaining in reaching ultimate resource allocation. While this analysis does not allow us to conclude that married women (or their children) were necessarily better off post-recession, it does suggest it is important to consider internal family dynamics alongside external factors in understanding how structural changes affect well-being.

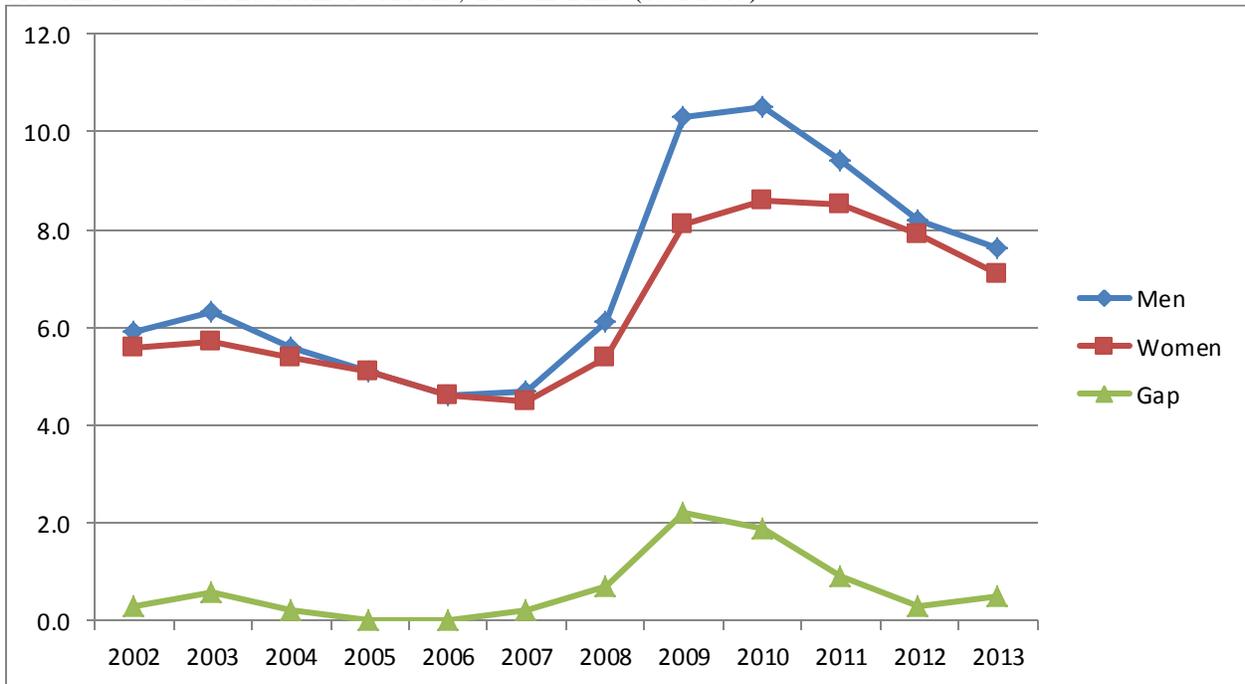
In future research we plan to extend the analysis further in time to see whether women's gain in bargaining power returned to pre-recessionary levels as male job sectors recovered, or whether there were any permanent positive effects on women's marital bargaining power.

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FIGURE 1—UNEMPLOYMENT RATES, BY GENDER (2002-2013)



Source: Authors' graph based on data from BLS (2014).

TABLE 1—RELATIVE CHANGE IN UNEMPLOYMENT RATES
FOR MEN AND WOMEN OVER THE RECESSIONARY PERIOD

State	Male, 2007	Female, 2007	Male, 2010	Female, 2010	Change in Gap, 2007-2010
Louisiana	4.1	4.4	7.7	8.0	0.0
New Jersey	4.5	3.9	9.7	8.8	0.3
Alaska	7.0	5.2	9.0	6.8	0.4
Nebraska	3.2	2.9	5.2	4.4	0.5
New York	5.1	4.1	9.3	7.7	0.6
Pennsylvania	4.8	3.7	9.5	7.6	0.8
Indiana	5.0	4.2	11.4	9.7	0.9
New Hampshire	3.9	3.3	6.7	5.1	1.0
Virginia	3.3	2.9	8.2	6.7	1.1
Missouri	5.1	4.9	10.1	8.8	1.1
Wisconsin	5.4	4.6	9.7	7.7	1.2
Colorado	3.5	3.9	9.1	8.3	1.2
Massachusetts	5.0	4.1	9.6	7.5	1.2
Maryland	3.3	3.9	8.0	7.4	1.2
Alabama	4.3	3.7	11.3	9.5	1.2
Texas	3.8	4.8	8.2	7.9	1.3
California	5.5	5.2	12.9	11.3	1.3
Kentucky	5.6	5.2	11.1	9.4	1.3
Rhode Island	5.0	4.8	12.0	10.5	1.3
Connecticut	4.6	4.4	9.9	8.4	1.3
Illinois	5.6	4.5	11.3	8.8	1.4
Kansas	4.0	4.1	8.1	6.7	1.5
Oklahoma	4.3	4.7	7.7	6.6	1.5
Maine	4.9	4.4	9.3	7.1	1.7
Idaho	2.9	3.1	9.7	8.1	1.8
Minnesota	5.1	4.1	8.6	5.8	1.8
Arizona	3.8	4.0	11.2	9.4	2.0
Hawaii	2.7	3.0	7.8	6.1	2.0
District of Columbia	5.0	6.0	9.7	8.6	2.1
Ohio	6.0	5.1	11.5	8.5	2.1
Washington	4.8	4.4	11.4	8.9	2.1
Florida	4.3	3.8	12.3	9.7	2.1
Delaware	3.5	3.5	9.7	7.3	2.4
West Virginia	5.0	4.1	10.5	7.1	2.5
Nevada	4.9	4.3	15.8	12.7	2.5
Oregon	5.1	5.2	12.3	9.7	2.7
Georgia	4.0	4.7	11.7	9.5	2.9
Utah	2.4	2.9	9.5	6.6	3.4
South Carolina	5.3	6.0	12.3	9.6	3.4
Tennessee	4.4	4.8	10.9	7.7	3.6
Michigan	7.0	7.1	14.3	9.9	4.5

Source: Author's calculations based on Local Area Unemployment Statistics, Bureau of Labor Statistics

TABLE 2—CHARACTERISTICS AND EXPENDITURE PATTERNS
BY CURRENT MARITAL STATUS AND GENDER

	Men		Women	
	Married	Single	Married	Single
Age	39.9	33.8	37.3	34.2
Race and Ethnicity				
White	84.1	79.8	84.0	68.2
Black	8.0	13.2	7.2	25.7
Asian	5.9	4.5	6.7	3.5
Hispanic	17.1	5.9	17.2	6.8
Education				
High School or GED	25.2	22.7	22.8	22.0
Some College	27.0	37.4	29.5	37.2
Bachelor's Degree	22.8	21.3	24.9	19.8
Graduate Degree	12.9	8.5	12.2	9.0
Marital Status				
Married	100.0	4.5	100.0	4.2
Never Married	0.0	67.7	0.0	58.2
Widowed	0.0	1.1	0.0	2.3
Divorced	0.0	21.5	0.0	25.4
Separated	0.0	5.1	0.0	10.0
Children				
Any	77.0	8.3	77.0	47.6
Young	30.1	1.6	30.1	15.7
Family Size	3.6	1.14	3.6	2.0
Percent Poverty Line	380.8	338.8	380.8	236.1
Urban	67.2	63.3	67.2	66.8
Expenditure Shares				
Groceries	12.0	11.8	12.0	15.0
Restaurant Meals	4.32	6.50	4.32	4.7
Housing	30.1	33.5	30.1	36.8
Household Services	4.7	3.1	4.7	4.3
Men's Clothing	0.4	1.1	0.4	0.1
Women's Clothing	0.7	0.1	0.7	1.5
Children's Clothing	0.8	0.2	0.8	0.9
Vehicle & Transport	16.0	13.8	16.0	12.8
Healthcare	4.7	2.5	4.7	3.2
Entertainment	4.9	4.7	4.9	4.5
Alcohol & Tobacco	1.3	3.6	1.3	1.9
Insurance & Pensions	13.3	10.7	13.3	8.1
Cash Contributions	2.6	3.6	2.6	1.5
Miscellaneous	0.9	1.0	0.9	0.8

Source: Author's calculations from the Consumer Expenditure Survey, 2005-2012.

TABLE 3—MALE HEADSHIP IS POSITIVELY RELATED
TO PARTICULAR EXPENDITURE SHARES

	Restaurant Meals	Alcohol & Tobacco	Vehicle & Transport	Entertain- ment	Insurance & Pensions	Men's Clothing	Savings & Investment
Intercept	8.17*** (0.31)	3.41*** (0.25)	15.61*** (0.73)	5.06*** (0.27)	3.22*** (0.34)	0.57*** (0.10)	2.61*** (0.34)
Male	1.28*** (0.10)	1.29*** (0.08)	0.69*** (0.23)	0.18** (0.09)	0.47*** (0.11)	0.97*** (0.03)	1.77*** (0.11)
Age	-0.09*** (0.01)	-0.01*** (0.00)	-0.08*** (0.01)	-0.02*** (0.01)	0.04*** (0.01)	-0.01*** (0.00)	0.03*** (0.01)
Black	-0.27** (0.12)	-1.21*** (0.09)	-0.61*** (0.27)	-1.06*** (0.10)	-0.01 (0.13)	0.10*** (0.04)	1.03*** (0.13)
Asian	1.13*** (0.23)	-1.22*** (0.19)	0.01 (0.54)	-1.60*** (0.20)	-0.35 (0.25)	-0.03 (0.07)	-0.06 (0.25)
Hispanic	0.87*** (0.18)	-1.32*** (0.15)	-0.26*** (0.43)	-0.83*** (0.16)	0.12 (0.20)	0.00 (0.06)	0.61*** (0.20)
Less than High School	-0.15 (0.22)	1.79*** (0.18)	-0.93*** (0.51)	-1.20*** (0.19)	-1.33*** (0.24)	-0.08 (0.07)	0.12 (0.24)
High School	-0.09 (0.19)	1.22*** (0.15)	1.00** (0.44)	-0.20 (0.17)	-0.34 (0.21)	-0.14** (0.06)	-0.19 (0.21)
Some College	0.11 (0.18)	0.77*** (0.14)	1.97** (0.42)	0.16 (0.16)	-0.56*** (0.20)	-0.06 (0.05)	-0.23 (0.19)
Bachelor's Degree	0.25 (0.18)	0.31** (0.15)	0.49 (0.42)	-0.01 (0.16)	0.05 (0.20)	0.02 (0.06)	-0.23 (0.20)
Never Married	0.10 (0.11)	0.23*** (0.09)	-1.25* (0.25)	0.24** (0.10)	0.72*** (0.12)	0.02 (0.03)	-2.32*** (0.12)
Young Children	-1.24*** (0.17)	-0.30** (0.14)	-0.14 (0.40)	-0.05 (0.15)	-0.62*** (0.19)	-0.30*** (0.05)	-0.04 (0.19)
Family Size	-0.24*** (0.05)	-0.45*** (0.04)	0.05*** (0.12)	0.29*** (0.04)	-0.07 (0.06)	0.06*** (0.02)	-0.49*** (0.06)
Percent Poverty Line	0.07*** (0.02)	-0.18*** (0.02)	0.24 (0.05)	0.10*** (0.02)	1.81*** (0.02)	0.00 (0.01)	0.25*** (0.02)
Urban	0.01 (0.10)	-0.32*** (0.08)	-1.24*** (0.23)	-0.58*** (0.08)	-0.65*** (0.11)	0.00 (0.03)	-0.62*** (0.11)
R2	0.06	0.09	0.01	0.03	0.38	0.08	0.08
N	15,179	15,179	15,179	15,179	15,179	15,179	15,179

*Significant at the 10 percent level.
**Significant at the 5 percent level.
***Significant at the 1 percent level.

TABLE 4—MALE HEADSHIP IS NEGATIVELY RELATED
TO PARTICULAR EXPENDITURE SHARES

	Groceries	Housing	Housing Services	Health Care	Women's Clothing	Children's Clothing
Intercept	11.14*** (0.49)	29.19*** (0.86)	4.49*** (0.35)	1.28*** (0.27)	3.01*** (0.12)	-0.11 (0.08)
Male	-0.39** (0.16)	-2.46*** (0.27)	-0.64*** (0.11)	-0.91*** (0.09)	-1.75*** (0.04)	-0.16*** (0.03)
Age	0.05*** (0.01)	0.21*** (0.02)	-0.02** (0.01)	0.09*** (0.01)	-0.03*** (0.00)	-0.01*** (0.00)
Black	0.88*** (0.19)	2.06*** (0.32)	-0.08 (0.13)	-0.70*** (0.10)	-0.11 (0.05)	0.27*** (0.03)
Asian	-0.32 (0.37)	2.14*** (0.64)	-0.28 (0.26)	-0.21 (0.20)	-0.02 (0.09)	-0.04 (0.06)
Hispanic	0.67** (0.29)	0.56 (0.51)	0.34 (0.21)	-0.53*** (0.16)	-0.09 (0.07)	0.06 (0.05)
Less than High School	6.02*** (0.35)	-1.99 (0.49)	-1.68*** (0.24)	-1.26*** (0.19)	-0.22** (0.09)	0.27*** (0.06)
High School	2.80*** (0.30)	0.09 (0.50)	-1.31*** (0.21)	-0.41** (0.17)	-0.23*** (0.07)	0.16*** (0.05)
Some College	0.35 (0.28)	-1.99*** (0.30)	-0.47** (0.20)	-0.37** (0.16)	0.06 (0.07)	0.11** (0.05)
Bachelor's Degree	-0.23 (0.28)	0.09 (0.50)	-0.35* (0.20)	0.20 (0.16)	-0.04 (0.07)	-0.01 (0.05)
Never Married	0.88*** (0.17)	1.98*** (0.30)	-0.35*** (0.12)	-0.18* (0.09)	0.06 (0.04)	-0.01 (0.03)
Young Children	1.84*** (0.27)	-1.18** (0.47)	3.99*** (0.19)	-0.20 (0.15)	-0.57*** (0.07)	1.21*** (0.05)
Family Size	1.54*** (0.08)	-0.73*** (0.14)	0.17*** (0.06)	-0.19*** (0.04)	-0.22*** (0.02)	0.43*** (0.01)
Percent Poverty Line	-1.15*** (0.04)	-1.17*** (0.06)	0.15*** (0.03)	0.01 (0.02)	0.03*** (0.01)	0.01 (0.01)
Urban	-0.84*** (0.15)	5.55*** (0.27)	-0.03 (0.11)	-0.32*** (0.08)	-0.07* (0.04)	-0.04 (0.03)
R2	0.25	0.08	0.05	0.05	0.14	0.21
N	15,179	15,179	15,179	15,179	15,179	15,179

*Significant at the 10 percent level.
**Significant at the 5 percent level.
***Significant at the 1 percent level.

TABLE 5—GENDERED RELATIONSHIPS TO EXPENDITURE SHARES HOLD UP TO ATTEMPTS TO ADDRESS SELECTION INTO MARRIAGE AND CHILDREN

	"Male-driven" Share				"Female-driven" Share			
	All	Married ^a	Widowed	Children	All	Married ^a	Widowed	Children
Intercept	39.37*** (0.75)	36.75*** (1.36)	19.47*** (6.41)	34.96*** (1.64)	48.74*** (0.79)	58.43*** (1.41)	74.37*** (6.85)	61.07*** (1.71)
Male	6.67*** (0.27)	7.65*** (0.44)	6.44*** (2.13)	6.13*** (0.61)	-6.33*** (0.28)	-7.19*** (0.45)	-5.12** (2.27)	-5.87*** (0.64)
Age	-0.15*** (0.02)	-0.12*** (0.03)	0.18 (0.14)	-0.11*** (0.03)	0.30*** (0.02)	0.14*** (0.03)	-0.10 (0.15)	0.11*** (0.04)
Black	-2.04*** (0.32)	-1.71*** (0.50)	-3.63 (2.27)	-2.21*** (0.44)	2.32*** (0.33)	1.67*** (0.52)	3.20 (2.42)	1.96*** (0.46)
Asian	-2.20*** (0.63)	-3.20*** (1.07)	-0.35 (4.66)	-2.32* (1.38)	1.30** (0.66)	2.99*** (1.11)	0.39 (4.98)	2.11 (1.44)
Hispanic	-0.80 (0.50)	-0.81 (0.72)	4.84 (4.09)	-1.83*** (0.70)	1.00* (0.53)	0.81 (0.75)	-6.20 (4.37)	2.03*** (0.73)
Less than High School	-2.42*** (0.47)	-2.16*** (0.70)	-5.16* (3.10)	-2.37*** (0.75)	4.24*** (0.49)	3.37*** (0.72)	3.86 (3.31)	3.80*** (0.78)
High School	0.62* (0.37)	0.54 (0.57)	1.47 (2.78)	0.71 (0.66)	1.22*** (0.39)	1.07* (0.59)	-1.88 (2.97)	0.87 (0.69)
Some College	1.51*** (0.32)	1.93*** (0.52)	-1.41 (2.57)	2.07*** (0.61)	-2.07*** (0.34)	-1.14** (0.54)	-0.34 (2.74)	-1.05 (0.64)
Never Married	-2.26*** (0.30)				2.37*** (0.31)			
Young Children	-2.69*** (0.47)	-3.20*** (0.71)	-4.27 (3.89)	-2.65*** (0.54)	5.08*** (0.49)	3.73*** (0.73)	5.98 (4.15)	3.26*** (0.56)
Family Size	-0.85*** (0.14)	-0.70*** (0.17)	1.22* (0.73)	-0.74*** (0.19)	0.99*** (0.15)	0.52*** (0.18)	-1.46* (0.78)	0.67*** (0.20)
Percent Poverty Line	2.27*** (0.06)	2.26*** (0.10)	2.89*** (0.49)	3.09*** (0.15)	-2.11*** (0.06)	-2.44*** (0.10)	-3.51*** (0.53)	-3.43*** (0.16)
Urban	-3.38*** (0.26)	-2.88*** (0.40)	-4.46** (1.92)	-3.16*** (0.42)	4.25*** (0.28)	2.69*** (0.42)	6.37*** (2.06)	2.64*** (0.43)
R2	0.22	0.26	0.26	0.22	0.23	0.26	0.27	0.24
N	15,179	5,692	266	4,515	15,179	5,692	266	4,515

^aThese adult household heads were either previously married or married, but separated.

- *Significant at the 10 percent level.
- **Significant at the 5 percent level.
- ***Significant at the 1 percent level.

TABLE 6. EFFECT OF GENDERED CHANGES IN UNEMPLOYMENT RATES ON MARITAL BARGAINING POWER, 2007-2010

	All	Low-income Families	Families with Young Children	African-American Women	Hispanic Women
Intercept	-22.55*** (2.54)	-9.10 (5.84)	-32.12*** (4.89)	22.79** (9.94)	6.51 (6.21)
Post-recession * High-gap States	-1.95** (0.93)	-7.03** (3.43)	-5.69** (2.68)	-5.56 (3.38)	-5.21 (3.19)
Post-recession	0.55 (0.78)	-0.14 (2.19)	2.17 (2.02)	0.45 (1.68)	1.02 (1.53)
High-gap States	2.51 (1.64)	3.11 (3.22)	5.14** (2.39)	1.02 (2.94)	2.11 (3.85)
Poverty Level	4.19*** (0.22)		3.92*** (0.35)		
Presence of Young Children	-7.74*** (0.66)	-4.65** (1.84)		-8.36** (3.18)	-7.64*** (1.69)
Family Size	1.17*** (0.21)	0.22 (0.52)	2.59*** (0.68)	-2.11*** (0.70)	-0.86 (0.61)
Age, Husband	0.01 (0.06)	-0.02 (0.14)	0.22* (0.11)	-0.12 (0.20)	0.02 (0.08)
Age, Wife	-0.05 (0.07)	-0.26* (0.14)	-0.45*** (0.16)	0.03 (0.27)	-0.01 (0.10)
Black, Husband	-3.01 (2.05)	-6.63 (6.98)	-2.08 (4.40)	-5.90 (5.35)	-5.30 (4.70)
Black, Wife	-1.55 (2.58)	-0.33 (8.60)	-0.98 (4.91)		
Asian, Husband	-1.41 (1.76)	-8.29 (8.15)	2.00 (2.71)	3.28 (7.21)	16.95* (9.88)
Asian, Wife	-3.15** (1.29)	0.85 (9.07)	-4.07 (2.57)		
Hispanic, Husband	-2.84** (1.32)	-7.08** (2.92)	-1.48 (1.95)	-6.51 (7.79)	-5.52** (2.07)
Hispanic, Wife	-0.75 (1.79)	0.25 (3.21)	-1.14 (1.97)		
Less than High School, Husband	-2.11 (1.47)	1.38 (4.84)	-4.00 (2.59)	-6.92 (4.22)	-8.93*** (2.71)
High School, Husband	2.57** (1.01)	5.23 (4.38)	4.12** (1.88)	1.25 (4.03)	-2.67 (2.79)
Some College, Husband	3.84*** (0.98)	7.59 (4.77)	4.78*** (1.47)	0.89 (4.58)	5.00* (2.71)
Bachelor's Husband	1.16 (0.80)	4.91 (4.62)	3.29* (1.71)	-0.48 (4.68)	-1.41 (3.36)
Less than High School, Wife	-2.43* (1.40)	-1.20 (4.16)	-0.67 (2.58)	-24.28*** (7.70)	-12.46*** (3.47)
High School, Wife	-1.98** (0.83)	-0.95 (4.37)	-1.26 (1.80)	-18.71*** (4.80)	-11.14*** (3.16)
Some College, Wife	-0.47** (0.91)	-0.09 (4.34)	-1.23 (1.88)	-11.24* (5.53)	-6.21 (3.72)
Bachelor's, Wife	-1.43** (0.62)	-2.38 (3.84)	-2.82* (1.47)	-7.15 (5.21)	-3.69 (2.99)
Urban	-6.50*** (1.30)	-6.89*** (2.26)	-5.45*** (1.53)	-7.50*** (2.04)	-5.17* (2.77)
R2	0.14	0.06	0.09	0.12	0.12
N	7960	1656	2470	579	1469

*Significant at the 10 percent level.

**Significant at the 5 percent level.

***Significant at the 1 percent level.