Women's Housework: A New Test of Time and Money

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Abstract

This study contributes to the research on the gendered division of household labor by exploiting variation by the day of week to reconsider three main explanations for variation in women's housework time. I predict that while evidence of gender deviance neutralization (often measured by women's share of earnings) should be evident across the days of the week, evidence of time constraints, and potentially absolute income, should be most apparent on weekdays. I test these hypotheses with the largest sample to date (American Time Use Survey 2003-2012) and careful consideration of the functional form between resources/constraints and housework time. I find that all three measures of resources/constraints – relative earnings, absolute earnings, and work hours – perform as poor predictors of women's housework on weekends. On weekdays, women's own work hours and earnings have diminishing returns on housework time. I find no support for compensatory gender display as measured by women's relative earnings.

INTRODUCTION

In the 1990s and early 2000s, several scholars found that women who out-earned their husbands performed more housework (Bittman et al. 2003 in Australia; in the U.S.Evertsson and Nermo 2004) or a greater share of housework (Greenstein 2000 in the U.S.) than other women. That is, relative income had a curvilinear (quadratic) relationship with housework hours and share. This finding was interpreted as evidence of gender deviance neutralization or compensatory gender display; essentially that "gender trumps money" (Bittman et al. 2003; Greenstein 2000). This built on earlier work that found economically dependent husbands retreated from housework (Brines 1994). These findings are at odds with popular economic-based explanations for the division of household labor such as bargaining models and thus provide support for the importance of "doing gender" (West and Zimmerman 1987).

Later work, however, casts doubt on this finding. Gupta (2007) examined the importance of women's absolute income versus her relative income, finding that absolute income was a better predictor of housework and finding no evidence of gender deviance neutralization. He argued for an autonomy, or "her money, her time", model (see also Gupta 2006; Gupta and Ash 2008). Building on this work, Killewald and Gough (2010) argued that absolute income had diminishing returns as the easiest and cheapest tasks to outsource or forego would be jettisoned as income rose, but housework would plateau as women found it more difficult to find acceptable substitutes. They found support for this hypothesis and that when properly accounting for the relationship between income and housework, the quadratic relationship between housework and relative earnings disappeared. Once Greenstein (2000) and Evertsson and Nermo's (2004) findings with National Survey of Families and Households (NSFH) and Panel Study of Income Dynamics (PSID) were revisited by Gupta (2007) and Killewald and

Gough (2010), respectively, there was no compelling evidence of gender display for US women. A review by Sullivan (2011) largely concluded that the debate was over. [1]

Prior research using the NSFH and PSID, however, is limited in two key respects. First, both the NSFH and the PSID ask respondents to estimate how much time they spend on housework per week. The NSFH gauges time in specific tasks such as cooking, washing dishes, cleaning, and laundry, whereas the PSID does not impose a specific definition of housework. Beyond the difficulty of accurately estimating how much time you spend on housework during a week, Kan (2008b) argues that evidence of neutralizing gender deviance may simply reflect social desirability bias. That is, "gender deviants" do not perform more or less housework than others, they simply report in ways that are consistent with neutralizing deviance. She finds support for this hypothesis among men with gender traditional attitudes; they perform more housework, according to their time diary records, than they report in an accompanying survey. Unfortunately, Kan does not investigate women's housework reporting by relative earnings. Second, the gender deviance neutralization hypothesis concerns the right tail of the distribution (e.g., women who out-earn their husbands). Thus, sample size is important. Previous studies using the NSFH and the PSID have analyzed around 2,000 couples (Evertsson and Nermo 2004; Gupta 2007). Thus, only about 200 women are in the tail as measured by the 90th percentile.

Given these limitations, new evidence on the gender deviance neutralization hypothesis using the American Time Use Study (ATUS) is compelling. The ATUS has a larger sample than the NSFH or PSID and time diary data is argued to be better than survey questions. Using the ATUS, Schneider (2011) finds a quadratic relationship between women's share of earnings and housework time that is robust to absolute income and the exclusion of outliers. In a second paper, Schneider (2012) argues that occupation is more salient and visible marker of gender deviance

than income and finds evidence of a quadratic relationship between occupational sex composition and women's housework. That is, women in predominately male occupations do more routine housework. These new findings, with arguably the best data on housework time, support gender deviance neutralization. Women who out-earn their partners or work in male-dominated occupations compensate by doing more housework than economic exchange models would predict.

While one group of scholars has been deeply engaged in understanding the relationship between earnings and housework, another has focused on time constraints, or "gendered" time constraints (Bianchi et al. 2000). The time constraints perspective proposes that individuals pragmatically respond to demands to do housework given their availability to respond, and that partners distribute workloads toward equilibrium (Blood and Wolfe 1960; Coverman 1985). Research generally finds support for this approach—spousal work hours and the presence of children increase individuals' housework time, and individuals' work hours decrease their housework time. Time constraints, however, do not affect men and women equally—women's time is more responsive to their own employment hours and to children than is men's (Bianchi et al. 2000). The perspective, on its own, does not explain why time constraints are gendered. Part of the challenge for scholars is disentangling the relationships among hours, absolute earnings, and relative earnings.

Overall, sociologists agree that housework is deeply gendered and that women have retained responsibility for housework despite their economic gains. There are three key points of contention, however. First, do women in gender deviant positions compensate by performing more housework than other women? Second, is absolute income a better predictor of women's housework than relative earrings? Third, is time more important than (relative or absolute)

money? Using the largest sample to date and exploiting variation by the day of week, I carefully consider the characteristics of women in the upper tail of the distribution – as measured by earnings, relative earnings, and hours (and occupation in a supplementary analysis) – and the functional form between these resources/constraints and housework time. I find no evidence of compensatory gender display. Results best support a time constraint approach, although absolute income, to a point, further reduces weekday housework time.

<div align="center">THEORY</div>

The importance of relative resources, typically assessed via women's share of family income, for the division of household labor is most closely aligned with bargaining or social exchange. Both perspectives focus on how partners may have conflicting interests and use their resources to negotiate out of doing housework. The greater the relative resources, the less housework an individual should do. The relative resources hypothesis is alternately derived from game theory in economics and social exchange theory in sociology (Blood and Wolfe 1960; Edwards 1969; Heer 1963; Manser and Brown 1980; McElroy and Horney 1981). If relative resources accounts for the division of household labor, women who have greater income vis-à-vis their partners should do less housework than other women.

Sociologists, however, contend that housework is not simply an exchange based on economic resources, but is one way gender is reproduced. The most prominent theory in this camp, "doing gender," focuses on gendered expectations for interaction and how individuals construct gender through housework (Fenstermaker Berk 1985; South and Spitze 1994; West and Zimmerman 1987). Drawing on ethnomethodology (Garfinkel 1967) and extending gender display (Goffman 1977), West and Zimmerman (1987) posit that individuals continuously do gender in interaction because their behaviors are always accountable to and assessed by their sex

category. The most common hypothesis derived from this theory is that in counter-normative situations, such as when they out-earn their husbands, women will do gender by doing more housework than women in normative situations. Findings of gender deviance neutralization are quite popular, in part, because they document the persisting gendered nature of housework that defies economic logic, illustrating how gender affects the way "money could be converted to interpersonal power" (England 2011, 25).

The gender deviance neutralization hypothesis has been examined almost exclusively with relative earnings. In a recent paper, Schneider (2012) introduces another measure of gender deviance by hypothesizing that men and women in gender-atypical occupations may compensate for gender deviance by doing less and more housework, respectively. He argues that working in a gender-atypical occupation is a better marker of gender deviance than relative income because it is more visible and stable than income. Using the ATUS he finds support for deviance neutralization (Schneider 2012).

Although the theoretical underpinnings are less clear, another group of researchers have focused on considering how else economic resources might matter for women's housework. Gupta (2006, 2007) makes a strong case for the importance of women's absolute earnings, not earnings relative to her partner, for her housework time. His argument begins with women's normative responsibility for housework. He posits that as women's own earnings increase they can use this money, in part, to buy out of their responsibility for routine housework by hiring housekeeping service or purchasing prepared meals. Women's own earnings might also reduce their sense of obligation for housework, allowing them to "opt out" instead of "buy out" (Killewald 2011). Gupta (2006, 2007) finds that women's own earnings are a better predictor of women's housework time than relative earnings.

Building on this work, Killewald and Gough (2010) hypothesize that women's absolute earnings will reduce their housework, but only to a point. That is, there are constraints on the ability and desire to outsource or forego housework, even among high-earning women. These constraints include attitudes towards using household help and transaction costs, such as hiring and monitoring. They hypothesize that earnings allow women to purchase help with tasks that are the cheapest and easiest to outsource. But that as earnings rise, women are left with the tasks that are most difficult to outsource or forego. High earning women will do less housework than women who earn less, but the relationship between own income and housework is one of diminishing returns. Using a linear spline they found support for this hypothesis. There was a steep negative relationship between income and housework time up to the 50th percentile of women's earnings, after which additional income provided much smaller returns (Killewald and Gough 2010).

In contrast to a focus on earnings, time constraints, focuses on individuals' pragmatic allocation of work given availability and demand for housework, predicting that partners distribute workloads toward equilibrium (Blood and Wolfe 1960; Coverman 1985). This perspective does not have distinct theoretical underpinnings, but arose from early studies concerned with the effect of women's employment on the division of household labor (Blood and Hamblin 1958; Heer 1958). Some researchers, however, have aligned this perspective with rational choice theory, or have extended this hypothesis to explicitly incorporate concepts from Becker's (1981/1991) new home economics, such as comparative advantage (Blair and Lichter 1991; Greenstein 1996; South and Spitze 1994). Individuals are hypothesized to do less housework the more time they spend on employment, and more housework the more time their partner spends on employment and the more children they have. The perspective has been

extended to consider the time flexibility of tasks, such that individuals with more time available during the times of the day when fixed tasks, such as cooking, need to be completed should be more likely to do these time-inflexible tasks (Blair and Lichter 1991; Presser 1994). Building on this work focusing on the timing of tasks, I extend each theory to consider expected variation by the day of the week.

VARIATION BY DAY OF THE WEEK

To gain additional leverage on our understanding of micro-levels mechanisms, I consider what each theory would predict about variation across the days of the week. Housework time is typically measured as hours per week (e.g., studies using the NSFH and the PSID) or in time use studies as minutes per day or weekly estimates (Bianchi et al 2000). Although not typically applied to housework, research on time spent with children has explored patterns by the day of the week and found different correlates for weekdays and weekends (Hook and Wolfe 2012; Yeung et al. 2001). I consider what patterns our leading theories of the division of household labor imply about weekday versus weekend housework time.

(1) The gender deviance neutralization (GDN) perspective, typically measured by women's share of earnings, predicts that high share women should "display" gender by doing more housework than other women (e.g., women earning 1/2 or 3/4 of the income). We should observe gender display on both weekdays and weekends. That is, there is no reason that women should restrict this behavior to weekdays. In fact, if high share women also tend to be high hours (which they are in dual-earner households), we may expect that weekends are an ideal time to engage in gender display because weekend time is less constrained.

(2) In contrast, a time constraints perspective predicts that women working long hours should do less housework than others. Time constraints should be most acutely felt on weekdays/workdays. We may anticipate some "catch up" time shifted to weekends, but housework would complete with other activities that employed women may want to catch up on including time with family, leisure, and self-care. Time constraints predicts that housework time is reduced -- shifted to partners, outsourced, or simply foregone. Thus, we should see a strong negative pattern by hours on weekdays, but little to no difference on weekends.

(3) Finally, an absolute earnings or "her time, her money" perspective predicts that women with higher earnings (up to a threshold) purchase substitutes or forego housework. We should find that women with higher earnings do a smaller amount of housework on weekdays and weekends. There is, however, the possibility that women focus their purchases on weekdays when they most need reduced housework time, introducing a steeper relationship between earnings and housework time on weekdays.

In summary, by extending these perspectives to consider variation across days of the week, I hypothesize the following relationships:[2]

	Weekday	Weekend
GDN (share)	Curvilinear. Positive in tail.	Curvilinear. Positive in tail.
Time constraints (hours)	Negative.	Zero.
Absolute earnings (earnings)	Negative. Non-linear.	Negative. Non-linear. OR zero

To shed additional light on these three theorized mechanisms, I examine three measures– earnings, relative earnings, and hours – by the day of week using the largest sample to date. The

analysis begins with descriptive analyses, examining the characteristics of women in the 90th percentile of each measure and the relationship between resources/constraints and housework time across the distribution. Next, I use multivariate models with linear splines to examine the functional form of the relationship between resources/constraints and women's housework time as well as the relative strength of each measure in combined models. I find no evidence of compensatory gender display, or relative earnings, instead finding support for "her time and her money."

METHOD

Data

I pool ten cross-sections (2003-2012) from the American Time Use Survey (ATUS) using the ATUS Extract Builder, the ATUS-X (Hofferth, Flood and Sobek 2013). The American Time Use Survey is a large, nationally representative survey sponsored by the Bureau of Labor Statistics to gain insight into how, where, and with whom people spend their time. Respondents are randomly drawn from households that have completed their eighth and final interview for the Current Population Survey (CPS) and interviewed approximately two to five months after their final CPS interview. The CPS samples the civilian, non-institutional population residing in households. ATUS sub-samples the CPS so that each state is represented proportional to its share of the national population, it oversamples Hispanics, non-Hispanic Blacks, and households with children. One adult from each household is selected to be the respondent. The sample is randomized by day; Mondays through Fridays account for 10 percent each, and Saturdays and Sundays for 25 percent each (Bureau of Labor Statistics, 2013).

Respondents are interviewed, using computer-assisted telephone interviewing, about their time use in the 24 hours prior to 4 a.m. on the day of the interview. In addition to collecting time

diary data, interviewers review and update information from the last CPS interview including the household roster and employment. The overall response rates ranged from 52.5 percent to 57.8 percent. The primary reason for refusal was survey fatigue. The official ATUS weights make adjustments to account for differential non-response rates across days of the week and demographic groups as defined by race, sex, age, presence of children, and education (BLS, 2013). Research shows that nonresponse in ATUS has a very small effect on estimates of time use (Abraham, Maitland, and Bianchi 2006). Descriptive statistics and analyses are weighted.

Sample

It is an important theoretical and empirical question whether to restrict the scope to dual-earner households or to include male- and/or female-sole breadwinner households. On one hand, extreme cases of economic dependency should highlight compensatory gender display. That is, women who provide all of the income may have more to compensate for than women who earn 75 percent of the income. On the other hand, including non-employed partners complicates the analysis and calls into question our expectations about work effort and the division of household labor. Is there something qualitatively different about being non-employed versus having a low income relative to your partner? That is, do we expect that earning 20 percent of family income is equal distance between earning 0 percent and 40 percent of family income? Furthermore, what does being non-employed mean and does this differ between men and women? In the ATUS, excluding the retired and disabled (who are likely to contribute to family income through retirement or disability pensions) we can divide those who are not employed into those not in the labor force versus the unemployed. The majority of women who are not employed are not in the labor force (only 10.5 percent are on layoff or looking for work). In contrast, the majority of men (54.1 percent) who are not employed are on layoff or looking for work. Thus most women

who are fully dependent (0 percent of couple earnings) are stay-at-home partners whereas most women with fully dependent partners (100 percent of couple earnings) are partnered to men who are temporarily unemployed and may be receiving unemployment payments while job seeking. It is less clear how we should expect housework to re-adjust during temporary periods of unemployment and/or an active job search than what we might expect when one spouse withdraws from the labor market entirely. Previous studies have taken multiple strategies for sample selection. For example, Killewald and Gough (2010) limit their main sample to dual-earner households, Gupta (2007) limits his sample to employed women, allowing households with dependent men but not women, whereas Schneider (2011) includes households with dependent men and women. I include sole-breadwinner households in the first set of models and then restrict the analysis to dual-earner households when I jointly test share, earnings, hours.

The pooled surveys include 34,382 women ages 18 to 65 living with an opposite sex spouse or unmarried partner, from which I retain a sample of 31,235 women in a couple where at least one person was employed. The BLS does not collect earnings for the self-employed, thus I omit self-employed respondents and respondents with a self-employed partner (n=5,500). I exclude women with partners who were not yet in the sample at the last CPS interview (n=1,093), women and women with partners who were absent from work last week (n=1,022), and women with partners who were missing earnings (n=666). I also exclude respondents if they or their partner were retired (n=854), disabled (n=699), unable to work (n=24), missing employment status (n=29), or if both partners reported zero earnings (n=14). The final sample is 21,344 women, which represents 68.3 percent of women in opposite-sex couples with at least one employed partner. This includes 13,657 (64.0%) dual-earner couples, 5,961 (27.9%) male-breadwinner couples, and 1,716 (8.0%) female-breadwinner couples.

The final sample has no missing values on necessary remaining variables. The Census Bureau excludes all diaries with fewer than five activities or 21 hours, and uses three methods to fill in missing information. Relational imputation uses information on household members, longitudinal assignment uses the most recent CPS interviews, and hot-deck allocation uses a method similar to multiple imputation (BLS, 2013).

The ATUS is a rich source of data. The time-diary format is widely recognized as the most valid measure of time use. In surveys, respondents usually overestimate frequent and underestimate infrequent tasks (Marini and Shelton 1993). An advantage of time diaries, especially for potentially sensitive topics is that social desirability bias is minimized because respondents are not primed for topics. Housework time is derived from the diary; other measures are derived from the questionnaire.

Measures

Dependent Variable. The dependent variable is routine housework (also referred to as core or female-typed housework). I use activity groupings as defined by BLS in its published tables (available through ATUS-X); the activity codes include related travel time. I define routine housework as the sum of time spent in three BLS activity groupings: housework; food and drink preparation, presentation, and clean-up; and grocery shopping. For reference, routine housework is the vast majority of housework women perform. In this sample the mean is 122 minutes per day, compared to 13 minutes per day on non-routine (aka male-typed housework, defined as the sum of time spent in five BLS activity groupings: lawn and garden care; interior maintenance, repair, and decoration; exterior maintenance, repair, and decoration; vehicles; and appliances, tools, and toys). The ATUS only collects data for respondents' primary activities. If

respondents are multi-tasking it is at their discretion to report their main activity. I top code housework time to the 99th percentile, 540 minutes or 9 hours per day.

Independent Variables. Three independent variables are of interest: women's absolute income, women's relative share of income, and work hours. Weekly earnings include usual overtime pay and were collected at the last CPS interview. Earnings were updated at the ATUS interview if the respondent changed jobs or employers between interviews. Weekly earnings are top-coded by BLS at $2,884.61 per week (BLS, 2013), which affects 1.0 percent of women and 3.8 percent of their partners. Women's earnings were further top-coded to the 98th percentile at $2,211. The data were sparse from the 98th percentile at $2,211 to the BLS top code of $2,885, creating very wide confidence intervals. Earnings are not inflation adjusted from 2003 to 2012. I include indicator terms for year, which does not affect results.

Women's relative share of income is calculated from her own and her partners' weekly earnings. Partners' weekly earnings come from the final CPS interview, but partners' employment is updated at the ATUS interview. Share is calculated as respondent's earnings minus partner's earnings divided by the sum of earnings. It is then scaled between 0 and 1.

Work hours reports the hours usually worked per week. I top-code to the 99th percentile for women, 60 hours per week. Respondents could report that their usual hours vary; 2.0 percent of women have variable hours. To retain these cases I code those that report full-time employment to mean hours for full-time employees (42.5 for women) and part-timers to the mean for part-time employees (22.2 for women). Results are not sensitive to the inclusion of these cases.

Control Variables. Family income is a control variable and measures annual monetary income from all sources for all household members over age 14. It is top-coded by BLS at

$150,000 ($75,000 prior to October 2003). It is not adjusted for inflation. Partner workweek reports the hours usually worked per week. I top-code to the 99th percentile for men, 80 hours per week. 4.4 percent of partners have variable hours. I code those that report full-time employment to mean hours for full-time employees (44.2 hours for men) and part-timers to the mean for part-time employees (29.0 hours for men). Results are not sensitive to the inclusion of these cases.

University degree is coded to one if the respondent has received a Bachelor's degree or more. Enrolled is coded to one if the respondent is enrolled, part- or full-time, in high school or college. Age is centered at the mean and a squared term is included in models. Race-ethnicity is measured with a series of dummy variables, including (1) Hispanic, (2) Non-Hispanic Black, (3) Non-Hispanic Asian/Pacific Islander or Native American (NA is grouped with Asian/PI because of the small sample size and similar mean housework time). The reference group is non-Hispanic white. Cohabitation is coded to one if the respondent is living with an unmarried partner. Number of children is measured with three dummy variables for one, two, or three or more children under the age of 18 who live in the household. No household children is the reference category. The models also include an indicator that the diary was completed on a holiday and a series of dummy variables for year.

Analytic Strategy

Most time use variables have a significant amount of zeros, creating an irregular distribution. These zeros arise from either a mismatch between the observation window (one day) and the period of interest (routine time use) or from respondents never engaging in an activity (Stewart 2013). I assume that zeros arise from this mismatch and not from a group of women who never perform housework. In this sample, 13.1 percent of women record no routine housework on their diary day.

Some researchers fear that OLS estimates will be biased because models violate normality assumptions and use Tobit models instead, which assume we do not observe the dependent variable over its full range. As applied to time use data, the Tobit specification assumes that some zero values are real and that some represent negative values that were not observed. The theoretical underpinnings of the Tobit do not fit time use variables which are bounded between zero and twenty-four hours per day. Recent empirical work demonstrates that OLS is preferred over Tobit and two-part models. Stewart (2009) finds that marginal effects from Tobit models are biased, increasingly so as the proportion of zeros increases. A two-part model performs similar to OLS, but OLS is preferred if a covariate predicts performance and time spent. I use OLS to model time spent on routine housework.

The crux of my strategy is twofold. First, I examine the functional forms of the relationships between resources/constraints and housework by using linear splines. Linear splines allow the relationship between resources/constraints and housework to vary along the distribution; that is each segment is allowed its own slope. I create three segments for each of the three measures: 1-50th percentile, 50th-90th, and 90th plus. Given my large sample size, I am able to examine the 90th percentile of each measure which is important given the argument of compensatory gender display is about the upper tail of the distribution. Previous work with linear splines has examined the 75th percentile of earnings (Killewald and Gough 2010), which is informative, but does not capture counter-normativity as well as the 90th percentile. Second, I compare models assessing the importance of earnings, share, and hours, separately by weekday and weekend.

RESULTS

Descriptive

Figure 1 shows the bivariate relationship between routine housework time and three measures of women's resources/constraints – relative share of earnings, absolute earnings, and work hours. The relationship is shown separately for weekdays and weekends. For each bivariate association I fit three relationship – linear, quadratic, and local polynomial smoothing (with 95 percent confidence interval) to explore the functional form of the bivariate association. Reference lines mark the 50th and 90th percentiles. There are three key patterns that emerge for all three measures of resources/constraints. First, there is a stronger relationship between resources/constraints and routine housework on weekdays than on weekends. Second, neither linear nor curvilinear fits well capture the relationship between resources/constraints and routine housework on weekdays. Third, there is little relationship between resources/constraints and routine housework on weekends. These are bivariate associations, however, so it is possible that the relationships change once other characteristics are controlled.

Table 1 shows the sample mean for all women with comparisons to women in the 90th percentile of the three measures – relative share, absolute earnings, and hours. Most noteworthy is that although women in the 90th percentile of share, earnings, and hours do less routine housework, on average, than other women, this is entirely driven by weekday routine housework time. There is no difference across groups in weekend housework time.

The characteristics of women (and their households) in the 90th percentiles differ from women overall. The overall means include 27.8 percent of women who are not employed, 64.2 percent who are dual-earners, and 8.0 percent who are employed, but whose partners are not employed (dependent partner). For women in the 90th percentile of share, 44.1 percent are dual-earners and the remaining 55.9 percent have dependent partners. In contrast, among the highest earning women 86.8 percent are dual earners and 13.2 percent have dependent partners. Among

the women working the longest hours 88.5 percent are dual earners and 11.5 percent have dependent partners.

Multivariate

Table 2 displays eight models predicting time spent on routine housework. Model 1 is the base model, including control variables, but omitting all three measures of resources/constraints. This model establishes that typical individual- and household-level characteristics do a better job of explaining variation on weekdays than on weekends. The R^2 for weekdays is .136 compared to .050 for weekends. Model 2 adds a linear spline for women's relative share of family earnings. Contrary to predictions derived from GDN, relative share is only a predictor of women's routine housework time on weekdays. Adding a spline for women's share of earnings increases the R^2 from .136 to .260 for weekdays, but leaves the R^2 unchanged for weekends and the Bayesian information criterion (BIC) increases indicating a worse fit when adding share to the model. The relationship between share and routine housework on weekdays is non-linear, but there is no evidence that women in the 90th percentile do more routine housework than other women. Fitted values are graphed in Figure 2.

Model 3 replicate model 2, but substitutes absolute income for share. Similar to Killewald and Gough (2010), I find a steep decrease in weekday housework time as earnings increase up to the 50th percentile. After the 50th percentile, there is no additional decline. The R^2 is similar to the R^2 for share at .261, but the lower BIC indicates that the model is slightly preferred over Model 2 (share). On weekends, we observe a small non-monotonic relationship, as shown in Figure 2, but the BIC indicates that the "empty" Model 1 is the preferred fit.

Finally Model 4 substitutes hours for absolute income. We observe a steep decrease in the 1st to 50th percentile, a more modest decrease from the 50th to 90th, and no additional decline

in the 90th on weekdays. Model 4 is the preferred model with a R^2 of .271 and the lowest BIC. Similar to the results for absolute income we see a small non-monotonic relationship, as shown in Figure 2, but the BIC continues to prefer (ever so slightly) the empty model. Overall, our predictors of housework time perform much more poorly on weekends than on weekdays.

The next step is to test share, earnings, and hours jointly. In the full sample, however, correlations between share, earnings, and hours are very strong (hours and share .74, hours and earnings .68, share and earnings .63). The strong correlations are due, partly, to the presence of non-employed (dependent) women who have values of zero for share, earnings, and hours. If we restrict the sample to dual-earner couples, we can reduced the correlations to moderate (.52, .44, and .59, respectively). Thus, the next stage of the analysis is restricted to dual-earners. Table 3 replicates Table 1, but with this new sample restriction. The general patterns hold. That is, the difference in routine housework time between the 90th percentiles and the sample overall is driven by weekday housework time. Note that the composition of the 90th percentile in share changes greatly after omitting women with fully dependent partners.

Table 4 replicates Table 2, but is restricted to dual-earner couples. There are four important points to note. First, the R^2 for dual-earners (on weekdays) are much smaller than for the full sample. Thus, much of our explanation is Table 2 is driven by the employed versus not employed distinction. R^2s drop from .26 to .27 in the full sample to .11 to .13 for the dual-earner sample. Second, results for weekdays are very similar to Table 2 and the R^2s and BIC continue to prefer Model 4 including work hours. Third, results for weekends differ from Table 2, but consistent with Table 2, more complex models are never preferred over the "empty" Model 1. Even among dual-earners, economic markers of share, earnings, and hours have little explanatory power for weekend routine housework time.

Table 5 extends table Table 4 to consider the joint role of hours, earnings, and share among dual-earner couples. Model 1 adds the earnings spline to Model 4 of Table 4 (work hours). On weekdays, this is an improved fit. The R^2s increases from .128 to .134 and the BIC is reduced. Model 2 adds share to Model 1. Share does not improve fit and all of the spline terms are indistinguishable from zero. For weekends, both Model 1 and Model 2 show no improvement on fit. The empty model is just as good as one that includes share, earnings, and/or work hours. For weekdays, the best model includes hours and earnings as diminishing returns. There is no independent role for relative earnings. There is no support for compensatory gender display for women who earn all or a high share of couple income.[3]

DISCUSSION

This study contributes to the research on the gendered division of household labor by exploiting variation by the day of week to reconsider three main explanations for variation in women's housework time. I predict that while evidence of gender deviance neutralization should be evident across the days of the week, evidence of time constraints (and potentially absolute income) should be most apparent on weekdays. I test these hypotheses with the largest sample to date and careful consideration of the functional form between resources/constraints and housework time. I find that all three measures of resources/constraints – relative earnings, absolute earnings, and work hours – perform as poor predictors of women's housework on weekends. On weekdays, hours and absolute earnings have a non-monotonic relationship with housework time. That is, women's own work hours and earnings have diminishing returns on housework time.

I find no support for compensatory gender display on any dimension (including in supplemental analyses of the sex composition of women's occupation). This does not mean that

women do not compensate for gender deviance, but there is no evidence that housework is a means for compensation. In fact, there are many other ways we might imagine women could re-assert their femininity both privately within the household and/or publicly in the community that don't involve extra vacuuming or scrubbing, such as through sex, appearance (Atkinson and Boles 1984), childcare, and public motherhood.

Furthermore, relative resources as measured by women's share of employment earnings, is not a compelling explanation for women's housework time. This does not mean that men and women don't bargain over household labor, but it does mean that bargaining is not finely calibrated to relative share of earnings. One possibility is that once women make a substantial contribution to family finances, as measured by her absolute income, small gradations of who makes more become trivial for daily housework. Expecting a fine calibration may even be far-fetched. For example, do we imagine that when one partner gets an annual raise and the other does not they re-negotiate who washes the dishes?

So we are left with women's responsibility for routine housework that they are able to reduce, to a point, with their own work hours and earnings. Women in the 90th percentile of hours, in dual-earner couples, do about 55 minutes of routine housework on an average weekday whereas women in the 90th percentile of absolute earnings do about 59 minutes of routine housework, which amounts to 25 to 30 minutes less per weekday than women in dual-earner couples on average. For these women, high hours or earnings could allow them to opt out leaving some housework "undone", outsource, or encourage their husbands to do more.

Since the 1960s women have reduced their housework time considerably and men have increased their time on routine tasks (Bianchi et al. 2012), but women – even high earning women -- are still spending substantial time each day on routine housework. Why? Routine

housework is, well, routine. It is the daily labor of meals on the table, cleaning up spills, loading and unloading the dishwasher. Few families can afford to employ daily help in the home or would want to (Kornrich 2012; van der Lippe, Frey, and Tsvetkova 2013). While domestic servants were once common in American households, the size of the domestic service workforce was at a 150 year low, per capita, by the start of the 21st century (Kornrich 2012).

So the essential question is what could move the dial on housework further? Feminist scholars have looked to men to continue increasing their time in household labor. As men have moved into roles as "new fathers" and aspire to more egalitarian relationships with their partners (Gerson 2002, 2010) they are now reporting as much work-family conflict as women (Aumann, Galinsky, and Matos 2011). Dual-earner families, particularly those with children, may simply be over-stretched. Beyond imaging a Jetsonian future of robots doing dishes or to-go dinners from the school cafeteria (Bowen, Elliott, and Brenton 2014), maybe we have neared the floor on housework and there simply is not much more that can be foregone and easily or willingly outsourced. Thus, the solution may not be women doing less and men doing more, under current conditions, but making meaningful changes to the workplace that reflect the reality of American families, which is majority dual-earner and single-parent. Instead of work crowding out family time, shorter workweeks for full-time employees and more employee-driven flexibility could help men and women meet desires for family life, which includes some amount of routine housework. For other families, the solution might mean ensuring enough work, with predictable schedules and living wages to ensure time and money for family life (Jacobs and Gerson 2004). I argue that our focus on the psychological needs of women to compensate for their gender deviance by doing more housework is no longer true, if it ever was, but furthermore draws our

attention away from employment practices that are out-of-sync with families, time poverty, and the limits to outsourcing.

ENDNOTES

[1] Recent quantitative and mixed methods research in the UK also finds little support for gender deviance neutralization (Kan 2008a; Lyonette and Crompton 2014). Recent work in Australia, however, confirms a curvilinear relationship indicative of gender display (Baxter and Hewitt 2013). Research stresses the importance of institutional context in explaining cross-national variation in mechanisms predicting housework and childcare across countries (Hook 2010; Hook and Wolfe 2012), but that is beyond the scope of this paper.

[2] I use the distinction weekdays/weekends instead of workdays/days off for two reasons. First, I include non-employed women in the analysis (and the non-employed do not have workdays/days off). Second, weekends are meaningful social distinction even if they coincide with a workday (e.g., children are typically not in school/daycare). For reference, 17.4% of women report working an hour or more on their weekend diary day.

[3] The variable for the percent of men in respondents' current occupation (described below) does not reach statistical significance for either a quadratic or linear spline specification. I find no evidence that women's routine housework time varies with occupational sex composition. Unlike those in the 90th percentile of share and earnings, women in the 90th percentile of occupational composition, do no more or less routine housework than other women (results available from author upon request).

I calculate occupational segregation using the 1 percent Integrated Public Use Microdata Sample (IPUMS-USA) of the pooled 2010 and 2011 American Community Survey (ACS)

(Ruggles et al. 2010). It reports respondents' primary occupation using the 2010 Standard Occupational Classification (SOC 2010). The pooled sample provides 3,625,545 workers in 492 occupations. The median number of workers observed in an occupation is 2,364 with a minimum of 119 and a maximum of 98,441. From the ACS I calculate the total number of men and the total number of workers in each occupation. The percent men in an occupation is calculated as the number of men divided by the number of workers in each occupation.

To match the ACS to the ATUS, which reports the four-digit Census Occupational Classification, I use the crosswalk the provided by BLS (http://www.bls.gov/cps/ cenocc2010.htm). Beginning in January 2011, the ATUS and CPS switched from the Census Bureau's 2002 to its 2010 Occupational Classification System. I crosswalk the ATUS data from the 2002 to the 2010 system using the Census Bureau's crosswalk (http://www.census.gov/ people/eeotabulation/data/2010_OccCodeswithCrosswalkfrom2002-2011nov04.xls). In the sample, women report 152 unique occupations. The most common occupations for women in the sample are female dominated: (1) Secretaries and administrative assistants (4.2 percent men), (2) Elementary and middle school teachers (19.7 percent men), and (3) Registered nurses (8.7 percent men). The most common male dominated occupations (at the 90th percentile of the sample and above ~ 67.8 percent+ men) are a heterogeneous group: (1) Janitors and building cleaners, (2) General and operations managers, (3) Chief executives, (4) First-line supervisors of non-retail sales workers, (5) Sales representatives, wholesale and manufacturing, (6) Software developers, applications and systems software, and (7) Production workers, all other.

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Figure 1. Routine housework time by share of income, weekly earnings, and weekly work hours. Separately for weekdays and weekends. Linear, quadratic and local polynomial smoothing (with 95% confidence interval), weighted. N = 10,575 for weekdays and 10,759 for weekends.
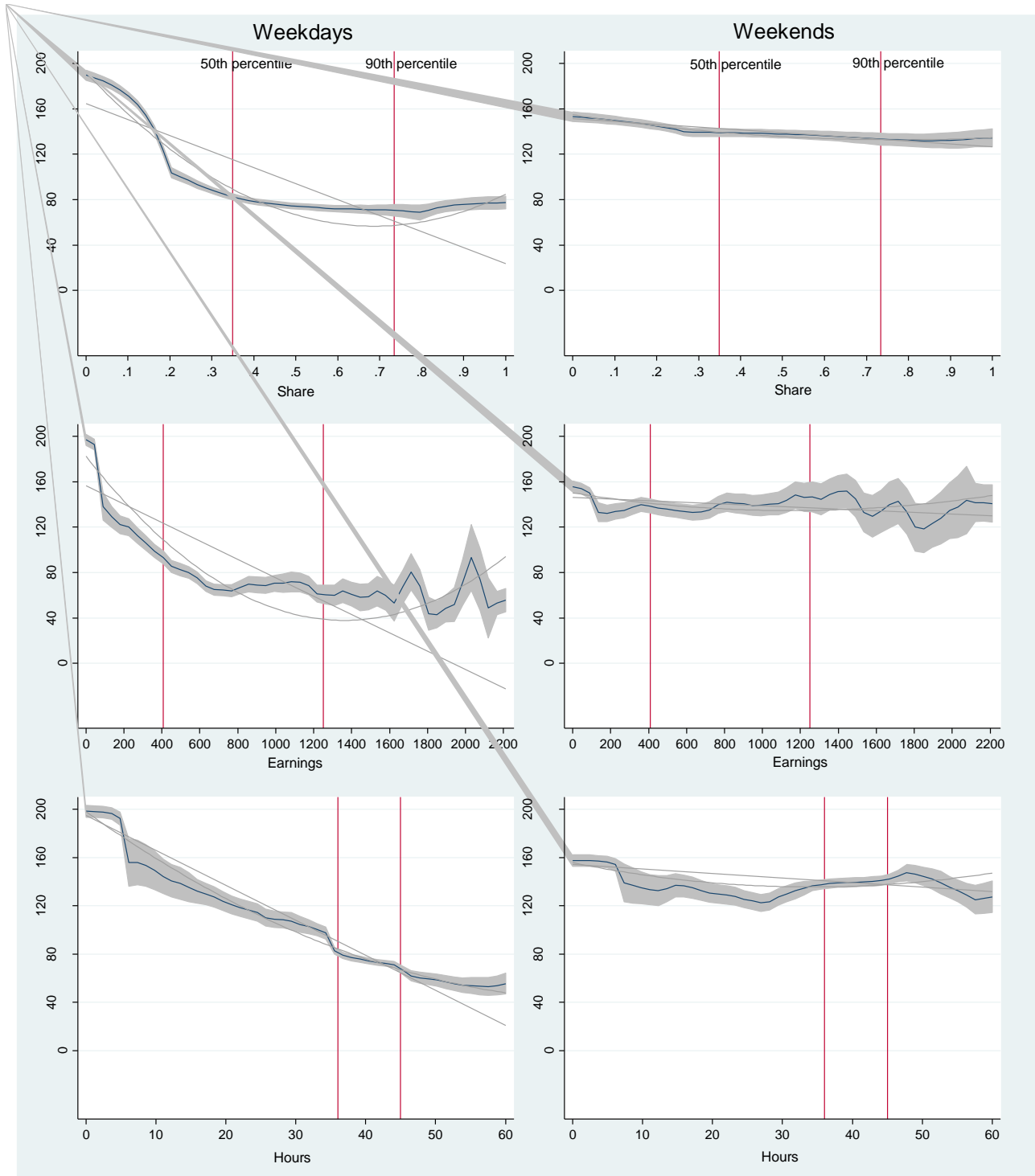
Note: Reference lines show the 50th and 90th percentiles.

Figure 2. Predicted values for routine housework time by share of income, weekly earnings, and weekly work hours, with 95% confidence intervals. N = 10,575 for weekdays and 10,759 for weekends.
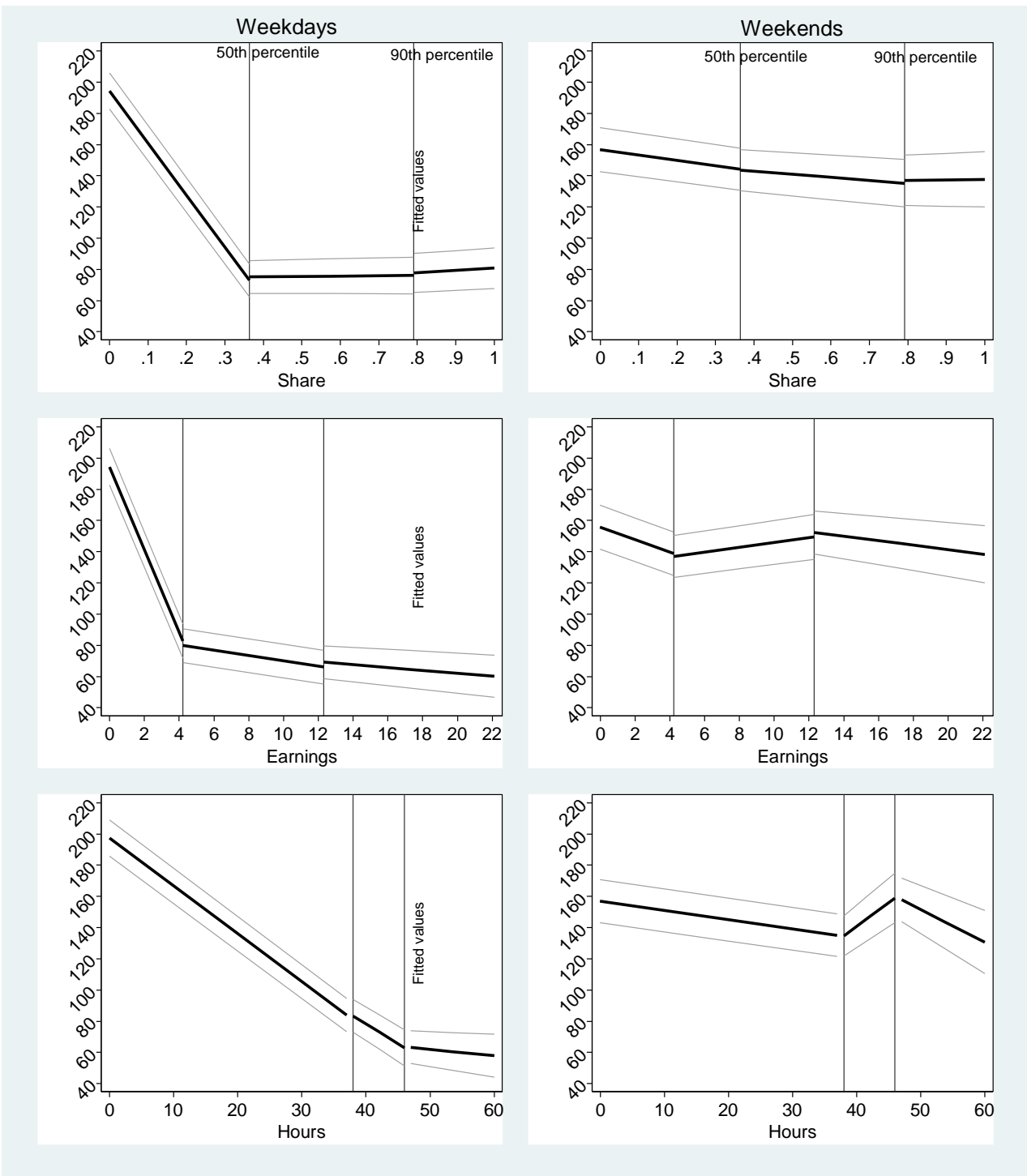
Note: Reference lines show the 50th and 90th percentiles.

Table 1. Means and standard errors, weighted

	All	Share		Earnings		Hours	
		Top 10%		Top 10%		Top 10%	
Routine Housework							
Average	122.09	93.01	***	82.20	***	80.37	***
	(1.04)	(2.86)		(2.41)		(2.57)	
N	21,334	1,919		2,202		2,042	
Weekday	114.01	76.73	***	59.79	***	57.37	***
	(1.32)	(3.31)		(2.64)		(2.74)	
N	10,575	962		1,092		1,015	
Weekend	142.44	134.92		139.98		140.03	
	(1.50)	(5.15)		(4.35)		(4.89)	
N	10,759	957		1,110		1,027	
Other housework	13.29	9.77	***	10.45	**	11.55	
	(0.43)	(1.03)		(1.25)		(1.46)	
Share of earnings	0.36	0.99	***	0.62	***	0.55	***
	(0.00)	(0.00)		(0.01)		(0.01)	
Weekly earnings	524.88	776.10	***	1684.00	***	1054.00	***
	(4.54)	(16.01)		(9.50)		(15.85)	
Work hours	27.80	38.44	***	44.09	***	52.82	***
	(0.16)	(0.29)		(0.21)		(0.13)	
Family income	73336.17	58156.00	***	118006.00	***	93027.00	***
	(363.02)	(1144.00)		(945.30)		(1165.00)	
Partner work hours	40.45	12.48	***	39.88		41.82	***
	(0.13)	(0.56)		(0.46)		(0.51)	
College degree	0.36	0.32	***	0.78	***	0.58	***
	(0.00)	(0.01)		(0.01)		(0.01)	
College enrolled	0.07	0.05	**	0.04	***	0.05	**
	(0.00)	(0.01)		(0.01)		(0.01)	
Age	40.67	44.93	***	43.42	***	42.74	***
	(0.10)	(0.37)		(0.27)		(0.32)	
Hispanic	0.15	0.12	***	0.04	***	0.06	***
	(0.00)	(0.01)		(0.00)		(0.01)	
NH-Black	0.07	0.12	***	0.06		0.07	
	(0.00)	(0.01)		(0.01)		(0.01)	
NH-Asian/API	0.07	0.06		0.10	***	0.05	***
	(0.00)	(0.01)		(0.01)		(0.01)	
Cohabiting	0.08	0.11	***	0.06	**	0.08	
	(0.00)	(0.01)		(0.01)		(0.01)	

Table 1. Continued

One child	0.22	0.19	***	0.21		0.18	***
	(0.00)	(0.01)		(0.01)		(0.01)	
Two children	0.23	0.16	***	0.23		0.18	***
	(0.00)	(0.01)		(0.01)		(0.01)	
Three+ children	0.13	0.08	***	0.07	***	0.07	***
	(0.00)	(0.01)		(0.01)		(0.01)	
Holiday	0.02	0.01		0.02		0.03	**
	(0.00)	(0.00)		(0.00)		(0.01)	

Note: * p<0.05, ** p<0.01, *** p<0.001 indicating the 90th percentile is different than the rest of the sample at standard levels of statistical significance.

Table 2. OLS predicting routine housework time (minutes per day), weighted

	Model 1		Model 2		Model 3		Model 4	
	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
Family income	-0.04 ***	0.00	-0.03 ***	0.00	-0.01 ***	0.00	-0.02 ***	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)
Partner work hours	0.80 ***	0.22 *	0.09	0.18	0.27 ***	0.22 *	0.26 ***	0.19
	(0.08)	(0.11)	(0.11)	(0.14)	(0.08)	(0.11)	(0.08)	(0.11)
College degree	-14.71 ***	-11.91 ***	-11.38 ***	-11.55 ***	-10.29 ***	-13.92 ***	-12.74 ***	-12.87 ***
	(2.68)	(3.36)	(2.51)	(3.40)	(2.55)	(3.44)	(2.51)	(3.38)
College enrolled	-25.68 ***	-8.22	-30.71 ***	-8.47	-31.34 ***	-7.94	-32.01 ***	-7.96
	(4.32)	(5.56)	(4.32)	(5.56)	(4.30)	(5.55)	(4.32)	(5.53)
Age	1.13 ***	1.78 ***	1.02 ***	1.78 ***	1.04 ***	1.79 ***	1.01 ***	1.81 ***
	(0.14)	(0.17)	(0.14)	(0.17)	(0.14)	(0.17)	(0.13)	(0.17)
Age-squared	0.01	-0.05 **	-0.01	-0.05 ***	-0.02	-0.05 **	-0.02	-0.05 **
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Hispanic	50.30 ***	33.38 ***	40.81 ***	33.01 ***	39.67 ***	32.51 ***	40.36 ***	32.85 ***
	(4.06)	(4.46)	(3.76)	(4.47)	(3.75)	(4.48)	(3.74)	(4.46)
NH-Black	-16.34 ***	-18.11 ***	-7.59	-17.65 **	-8.56	-18.31 ***	-9.04 *	-17.30 **
	(4.87)	(5.46)	(4.49)	(5.47)	(4.49)	(5.47)	(4.47)	(5.47)
NH-Asian/API	31.20 ***	25.75 ***	23.83 ***	25.23 ***	23.44 ***	25.37 ***	22.51 ***	25.81 ***
	(5.33)	(6.34)	(4.98)	(6.31)	(4.94)	(6.31)	(4.92)	(6.31)
Cohabiting	-17.57 ***	-7.80	-9.53 *	-7.39	-12.83 **	-7.73	-10.72 *	-7.73
	(4.69)	(6.03)	(4.43)	(6.04)	(4.45)	(6.04)	(4.41)	(6.00)
One child	26.97 ***	25.35 ***	15.42 ***	24.82 ***	13.78 ***	25.24 ***	12.31 ***	25.36 ***
	(3.40)	(4.11)	(3.21)	(4.13)	(3.23)	(4.12)	(3.23)	(4.11)
Two children	45.46 ***	30.22 ***	27.16 ***	29.26 ***	26.05 ***	30.07 ***	23.22 ***	29.95 ***
	(3.54)	(4.15)	(3.39)	(4.22)	(3.38)	(4.20)	(3.39)	(4.19)
Three+ children	71.50 ***	48.72 ***	41.24 ***	47.21 ***	39.21 ***	48.19 ***	35.98 ***	47.81 ***
	(4.39)	(5.24)	(4.25)	(5.33)	(4.24)	(5.31)	(4.27)	(5.31)
Holiday	41.79 ***	-8.91	36.54 **	-9.17	34.91 **	-8.98	35.45 **	-9.40
	(12.27)	(10.38)	(12.68)	(10.38)	(12.48)	(10.33)	(12.73)	(10.40)

Table 2. Continued

	Model 1		Model 2		Model 3		Model 4	
	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
Share Spline								
1-50th percentile			-292.53 ***	-11.60				
			(10.33)	(11.86)				
50-90th percentile			23.62	-6.35				
			(12.65)	(17.89)				
90th+ percentile			-39.73	7.34				
			(29.73)	(44.68)				
Earnings Spline								
1-50th percentile					-24.74 ***	-2.34 *		
					(0.91)	(1.04)		
50-90th percentile					-0.26	2.49 **		
					(0.58)	(0.84)		
90th+ percentile					-0.64	-1.44		
					(0.62)	(0.94)		
Hours Spline								
1-50th percentile							-2.74 ***	-0.37 **
							(0.10)	(0.11)
50-90th percentile							-1.26 *	3.67 ***
							(0.56)	(0.92)
90th+ percentile							-0.44	-2.00 *
							(0.46)	(0.79)
Constant	83.56 ***	123.63 ***	183.60 ***	128.72 ***	168.30 ***	129.12 ***	180.43 ***	129.73 ***
	(5.40)	(6.72)	(6.89)	(8.52)	(5.96)	(7.40)	(6.04)	(7.40)
R2	0.136	0.050	0.260	0.050	0.261	0.051	0.271	0.052
BIC	129442.4	135045.1	127826.3	135070.2	127816.8	135059.3	127671.8	135045.6
N	10,574	10,757	10,574	10,757	10,574	10,757	10,574	10,757

Note: * p<0.05, ** p<0.01, *** p<0.001. All models include a set of indicator variables for year.

Table 3. Means and standard errors, dual earners, weighted

	All	Share Top 10%		Earnings Top 10%		Hours Top 10%	
Routine Housework							
Average	99.90	87.04	***	82.30	***	78.57	***
	(1.10)	(3.25)		(2.99)		(2.92)	
N	13,702	1,343		1,445		1,538	
Weekday	84.62	69.20	***	59.38	***	54.75	***
	(1.31)	(3.76)		(3.27)		(3.04)	
N	6,740	652		706		764	
Weekend	137.75	130.45		140.03		140.04	
	(1.84)	(5.63)		(5.35)		(5.68)	
N	6,962	691		739		774	
Other housework	12.09	9.69	**	10.29		10.75	
	(0.51)	(1.05)		(1.59)		(1.43)	
Share of earnings	0.41	0.72	***	0.58	***	0.49	***
	(0.00)	(0.00)		(0.00)		(0.00)	
Weekly earnings	706.73	1194.00	***	1803.00	***	1073.00	***
	(5.28)	(19.76)		(10.23)		(17.74)	
Work hours	37.44	42.20	***	44.27	***	53.66	***
	(0.12)	(0.28)		(0.25)		(0.14)	
Family income	80024.42	83815.00	***	123588.00	***	96910.00	***
	(441.80)	(1379.00)		(1092.00)		(1327.00)	
Partner work hours	43.08	38.56	***	44.36	***	47.01	***
	(0.11)	(0.49)		(0.34)		(0.37)	
College degree	0.39	0.54	***	0.81	***	0.62	***
	(0.01)	(0.02)		(0.01)		(0.02)	
College enrolled	0.07	0.05		0.03	***	0.05	**
	(0.00)	(0.01)		(0.01)		(0.01)	
Age	41.05	42.52	***	43.03	***	42.34	***
	(0.13)	(0.43)		(0.32)		(0.36)	
Hispanic	0.11	0.07	***	0.03	***	0.06	***
	(0.00)	(0.01)		(0.00)		(0.01)	
NH-Black	0.07	0.10	***	0.06		0.07	
	(0.00)	(0.01)		(0.01)		(0.01)	
NH-Asian/API	0.06	0.07		0.10	***	0.05	
	(0.00)	(0.01)		(0.01)		(0.01)	
Cohabiting	0.08	0.08		0.06	**	0.08	
	(0.00)	(0.01)		(0.01)		(0.01)	

Table 3. Continued

One child	0.22	0.18	***	0.20		0.19	***
	(0.00)	(0.01)		(0.01)		(0.01)	
Two children	0.22	0.19	**	0.25	**	0.18	***
	(0.00)	(0.01)		(0.01)		(0.01)	
Three+ children	0.09	0.07	***	0.07	***	0.06	***
	(0.00)	(0.01)		(0.01)		(0.01)	
Holiday	0.01	0.01		0.02		0.02	*
	(0.00)	(0.00)		(0.01)		(0.01)	

Note: * p<0.05, ** p<0.01, *** p<0.001 indicating the 90th percentile is different than the rest of the sample at standard levels of statistical significance.

Table 4. OLS predicting routine housework time (minutes per day), dual-earners, weighted

	Model 1		Model 2		Model 3		Model 4	
	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
Family income	-0.03 ***	0.00	-0.03 ***	0.01	-0.01	0.00	-0.02 ***	0.00
	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)
Partner work hours	0.32 *	0.21	0.15	0.22	0.27 *	0.24	0.38 **	0.21
	(0.13)	(0.19)	(0.13)	(0.19)	(0.13)	(0.19)	(0.13)	(0.19)
College degree	-11.70 ***	-9.48 *	-8.99 **	-9.85 *	-4.95	-11.15 **	-9.91 ***	-9.81 *
	(2.82)	(4.09)	(2.81)	(4.13)	(2.86)	(4.25)	(2.79)	(4.12)
College enrolled	-16.53 ***	-13.86 *	-20.22 ***	-13.60 *	-19.75 ***	-13.30 *	-22.37 ***	-12.08
	(4.70)	(6.25)	(4.88)	(6.28)	(4.85)	(6.29)	(4.93)	(6.28)
Age	1.20 ***	1.92 ***	1.07 ***	1.97 ***	1.15 ***	1.95 ***	1.11 ***	1.97 ***
	(0.15)	(0.21)	(0.15)	(0.21)	(0.15)	(0.21)	(0.15)	(0.21)
Age-squared	-0.01	-0.03	-0.01	-0.03	-0.02	-0.03	-0.02	-0.03
	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)	(0.02)
Hispanic	32.59 ***	26.52 ***	35.10 ***	25.87 ***	29.78 ***	27.06 ***	34.55 ***	25.84 ***
	(4.71)	(6.31)	(4.64)	(6.31)	(4.58)	(6.31)	(4.62)	(6.31)
NH-Black	-13.88 **	-30.91 ***	-8.81 *	-32.18 ***	-10.24 *	-31.53 ***	-9.74 *	-32.47 ***
	(4.48)	(5.79)	(4.49)	(5.81)	(4.50)	(5.79)	(4.53)	(5.84)
NH-Asian/API	27.84 ***	18.96 *	28.98 ***	18.59 *	27.12 ***	19.08 *	27.39 ***	18.72 *
	(6.06)	(7.80)	(5.91)	(7.82)	(5.74)	(7.80)	(5.77)	(7.82)
Cohabiting	-12.55 **	-3.69	-10.59 *	-3.92	-12.72 **	-3.65	-11.42 *	-4.60
	(4.72)	(7.23)	(4.69)	(7.23)	(4.74)	(7.23)	(4.67)	(7.23)
One child	14.06 ***	27.62 ***	13.03 ***	27.91 ***	11.32 ***	28.39 ***	9.65 **	28.88 ***
	(3.36)	(4.90)	(3.35)	(4.90)	(3.35)	(4.89)	(3.37)	(4.88)
Two children	27.46 ***	30.36 ***	23.39 ***	31.31 ***	22.00 ***	31.66 ***	18.93 ***	32.45 ***
	(3.49)	(5.05)	(3.49)	(5.06)	(3.45)	(5.05)	(3.49)	(5.05)
Three+ children	41.25 ***	52.17 ***	35.82 ***	53.81 ***	33.08 ***	54.32 ***	30.22 ***	55.62 ***
	(4.99)	(6.78)	(4.96)	(6.83)	(4.90)	(6.81)	(4.99)	(6.85)
Holiday	57.13 ***	-10.98	58.85 ***	-10.35	57.66 ***	-9.36	59.64 ***	-11.04
	(15.12)	(12.45)	(15.19)	(12.40)	(14.77)	(12.36)	(15.09)	(12.40)

Table 4. Continued

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Share Spline								
1-50th percentile			-166.11 ***	54.16 *				
			(16.05)	(21.05)				
50-90th percentile			25.29	-35.11				
			(23.03)	(33.10)				
90th+ percentile			-11.20	-13.48				
			(38.25)	(59.69)				
Earnings Spline								
1-50th percentile					-12.29 ***	3.28 *		
					(1.02)	(1.39)		
50-90th percentile					-0.44	-0.03		
					(0.67)	(1.04)		
90th+ percentile					-1.30	-0.15		
					(0.77)	(1.30)		
Hours Spline								
1-50th percentile							-2.26 ***	0.66 **
							(0.19)	(0.22)
50-90th percentile							-1.20 **	1.15
							(0.40)	(0.74)
90th+ percentile							-0.88	-1.63
							(0.69)	(1.23)
Constant	82.44 ***	118.14 ***	145.74 ***	100.62 ***	128.57 ***	104.58 ***	160.60 ***	95.08 ***
	(7.30)	(10.43)	(9.39)	(12.53)	(8.36)	(11.58)	(9.87)	(12.65)
R2	0.084	0.048	0.112	0.050	0.121	0.050	0.128	0.051
BIC	80151.16	87782.73	79964.05	87800.18	79897.85	87800.62	79839.08	87790.85
N	6,739	6,961	6,739	6,961	6,739	6,961	6,739	6,961

Note: * $p<0.05$, ** $p<0.01$, *** $p<0.001$. All models include a set of indicator variables for year.

Table 5. OLS predicting routine housework time (minutes per day), dual-earners, weighted

	Model 1		Model 2	
	Weekday	Weekend	Weekday	Weekend
Hours Spline				
1-50th percentile	-1.51 ***	0.55 *	-1.50 ***	0.52
	(0.23)	(0.27)	(0.23)	(0.27)
50-90th percentile	-1.07 **	1.21	-1.08 **	1.24
	(0.41)	(0.76)	(0.41)	(0.76)
90th+ percentile	-0.97	-1.64	-0.99	-1.55
	(0.68)	(1.23)	(0.68)	(1.23)
Earnings Spline				
1-50th percentile	-6.54 ***	1.26	-6.98 ***	1.50
	(1.20)	(1.65)	(1.53)	(2.17)
50-90th percentile	-0.05	-0.28	-0.54	0.22
	(0.67)	(1.05)	(0.72)	(1.15)
90th+ percentile	-0.71	-0.45	-0.90	-0.26
	(0.77)	(1.31)	(0.77)	(1.33)
Share Spline				
1-50th percentile			-3.90	7.57
			(23.46)	(31.75)
50-90th percentile			43.16	-38.65
			(23.64)	(35.70)
90th+ percentile			-0.27	-16.79
			(37.49)	(60.35)
R2	0.134	0.051	0.135	0.051
BIC	79819.12	87816.31	79840.51	87840.41
N	6,739	6,961	6,739	6,961

Note: * p<0.05, ** p<0.01, *** p<0.001. Models include family income, partner work hours, college degree, college enrolled, age, age-squared, race-ethnicity (Hispanic, NH-Black, NH-Asian/API), number of children (one, two, three), holiday, and indictors for year.