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Gender Norms, Fairness and Relative Working Hours Within Households

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Abstract

Using data in the United States, UK and Germany, we show that women whose working hours exceed those of their male partners report lower life satisfaction on average. By contrast, men do not report lower life satisfaction from working more hours than their female partners. An analysis of possible mechanisms shows that in couples where the woman works more hours than the man, women do not spend significantly less time doing household chores. Women with egalitarian ideologies are likely to perceive this unequal division of labour as unfair, ultimately reducing their life satisfaction.

Keywords: fairness, gender identity, life satisfaction, relative working hours, housework

JEL Codes: I31, J12, J22

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1. Introduction

Gender equality in high-income countries has come a long way since the 1950s, with women now accounting for almost half of the entire labour force. In addition, the gender gap in earnings has substantially declined. However, despite these gains and the increasing trend in female educational achievements and decreasing trend in fertility rates over the last few decades (Black and Juhn, 2000; Goldin and Katz, 2002; Goldin et al., 2006), women still earn less and work fewer hours than men.⁴

One potential explanation for this is that women's progression in the labour market puts pressure on women and causes adverse well-being for couples. More than ever, women seem to approach the question of work and family as black and white: either they pursue their careers and continue doing most of the domestic work, while feeling unhappy, sad, stressed and tired for most of the day (Bertrand, 2013), or they quit their jobs or reduce their number of working hours because they feel this to be the only viable option to keep their partner – and themselves – happy.⁵ There is no in-between. As an illustration of this trade-off, research has shown that women's career progression and increasing divorce rates are highly correlated (Folke and Rickne, 2020). Highly educated women are also less likely to marry than their less-educated counterparts, and many of them choose to remain childless as a consequence of their higher wage potentials (Bertrand et al., 2016).

In this paper, we study the well-being patterns of couples where women's relative working hours exceed those of their husbands. Using data from the United States, UK and Germany, we show that women are *ceteris paribus* less satisfied with their life when working longer hours than their husbands. By contrast, husbands do not report lower life satisfaction by being in a relationship where they work relatively long hours compared with their wives. These results continue to be robust even after including individual fixed effects and addressing the potential endogeneity of relative working hours between husbands and wives.

⁴ As a result, studies have shown that the gender wage gap remains at around 20% among working-age full-time workers (Blau and Kahn, 1992, 2006).

⁵ See Fernandez et al., 2004; Fortin, 2005, 2015; Bertrand, 2010; Farré and Vella, 2013; Bertrand et al., 2015; Burszтын et al., 2017 for the persistence of gender norms and their labour market implications for women.

We argue that these results are best explained by evidence that in couples where women work more hours than their husbands, women continue to perform a more significant proportion of household tasks than their husbands. As a result, women are likely to feel overwhelmed and dissatisfied with their life. To provide evidence of this mechanism, we first examine how men and women allocate their time doing household tasks when working more hours than their partners. We find that women who work longer hours than their husbands do not spend significantly less time doing household chores than women who work fewer or the same hours as their husbands. These results support the idea conceptualised by Berk (1985) and West and Zimmerman (1987) that couples who deviate from traditional gender roles keep ‘doing gender’ by allocating housework responsibilities unequally at home (see also Bittman et al., 2003; Brines, 1994; Greenstein, 2000; Akerlof and Kranton, 2000, 2010; Cooke, 2006).

Provided that women whose working hours exceed those of their husbands hold less traditional views concerning the allocation of household tasks, this general lack of substitution in home production is likely to reduce well-being for women. Consistent with this hypothesis, we find evidence that women’s dissatisfaction from working longer hours than their husbands is significantly alleviated by a decrease in time spent doing household tasks. These results are consistent with studies in sociology that have found that women are more likely to perceive the division of household tasks as fair (Pleck, 1985; Thompson, 1991; Blair and Johnson, 1992; Lennon and Rosenfeld, 1994) and to report higher levels of well-being (Ross et al., 1983; Yogev and Brett, 1985) in households where their husbands help out more with the household chores or outsource them to other people.

We are able to rule out several alternative explanations. First, we find little evidence in our data to support the hypothesis that women are averse to working long hours and have a preference for part-time work (see Booth and Ours, 2008, 2009; Schröder, 2018). Another explanation with little support is that women report lower life satisfaction not because they work longer hours than their husbands *per se*, but because their working hours are long in an *absolute* sense and that they are tired from having to come home and still do most of the housework (Hochschild and Machung, 1989). Rather, our results suggest that women do not report lower satisfaction when working long hours and performing most of the housework *unless their working hours exceed those of their husbands*. Finally, we look at the timing of women’s relative working

hours and find no evidence that women experiencing lower life satisfaction are taking on more working hours than their husbands.

The fact that women whose working hours exceed those of their husbands feel less happy and dissatisfied with their life poses the question of how they could have incorrectly predicted their future feelings in the first place. For instance, according to positive assortative mating theory, men who are married to women whose working hours exceed theirs should, in principle, hold more egalitarian attitudes in general and compensate their wives by taking on more household tasks. One possible explanation for this misalignment is that there is imperfect assortative mating with respect to egalitarian views both at home and in the workforce, and that husbands' beliefs about gender and marital roles may not have improved as much as their wives' over the years. We therefore end our paper by providing evidence that women who work more hours than their husbands hold more egalitarian attitudes towards the division of household chores, on average, than women who work fewer or the same number of hours compared with their husbands. Moreover, we find that women feel dissatisfied from working longer hours than their husbands, while performing most of the household tasks, only in couples where women hold more egalitarian views on average.

Our paper replicates and builds on the results in Fleche et al. (2018), who present only simple correlations between life satisfaction and relative working hours within households. In this paper, we replicate the results using more data – both in terms of timespan and country coverage – and use these data to establish a plausible mechanism through which relative working hours may influence women's life satisfaction. Perhaps surprisingly, the number of works that have investigated the relationship between husbands' and wives' relative working hours and their related life satisfaction is sparse. Among the few notable studies, Booth and Ours (2008, 2009) have shown that men are more satisfied with their hours of work if they work full time, while women prefer part-time jobs. In addition, women's life satisfaction increases if their partners work full time, while men's life satisfaction is unaffected by their partners' working hours. In a more recent paper, Schröder (2018) provide evidence that fathers – and to a lesser degree, childless men and women – are more satisfied with life if they work full time or longer. By contrast, fathers' life satisfaction is unaffected regardless of whether their wives spend more or fewer hours in employment. Our results go beyond these studies by investigating the direct

relationship between relative working hours within households and life satisfaction. They also relate to previous findings by Stevenson and Wolfers (2009) showing that as women's wages and working hours have been increasing both absolutely and relative to those of men, their life satisfaction has been decreasing over recent decades.

We also contribute to an extensive literature that seeks to understand the causes and consequences of inequalities in household task allocation (Becker, 1973, 1974). In particular, the evidence that the level of husbands' contribution to housework is not strongly related to women's labour supply is well documented. Bittman et al. (2003), Brines (1994) and Greenstein (2000) highlight the fact that men who work fewer hours than their wives tend to adhere to a more traditional division of housework to 'do gender' and manage couples' interactions in light of traditional norms (see also Akerlof and Kranton, 2000, 2010; Bertrand et al., 2015; Ichino et al., 2019). Many studies in sociology have also shown that women are more likely to perceive a division of labour as unfair and to report lower levels of marital satisfaction if their husbands do not contribute sufficiently to household tasks (see Pleck, 1985; Yogeve and Brett, 1985; Blair and Johnson, 1992; Lennon and Rosenfeld, 1994). However, the latter results tend to rely on cross-sectional analysis or short panels (mainly in the United States). We add to this literature by showing that these results are pervasive, observed in both the United States and Europe and over long periods.

Finally, we contribute to the literature by considering gender ideologies as a moderating factor in the household division of labour on well-being. If it is well documented that there is a strong association between the number of hours a wife spends doing domestic work and the gender ideologies held by both husband and wife (see Blair and Litcher, 1991; Kamo, 1988; Sanchez, 1994; Greenstein 1996a, 1996b, 2000; Fernandez et al., 2004; Ichino et al., 2019), then it seems that most researchers on this topic have overlooked the interaction effects between husbands' and wives' ideologies and their consequences on the household decision-making process, one exception being Greenstein (1996a). Using data on 2,719 married couples from the National Survey of Families and Households, Greenstein provides evidence that husbands do relatively few household tasks "*unless both they and their wives are relatively egalitarian in their*

beliefs”.⁶ We find that women are likely to feel the least satisfied when working more hours than their husbands in couples where women adhere to more egalitarian gender norms than their husbands.

The rest of the paper proceeds as follows. Section 2 introduces our main data sources. Section 3 reports our results on the relationship between relative working hours and men’s and women’s well-being. Section 4 provides a variety of evidence that the household division of labour partly explains why women suffer more than men from working more hours than their wives. Section 5 investigates gender ideologies as a moderating factor in the effect of household division of labour on couples’ well-being. Section 6 concludes.

2. Data sources and sample selection

In this section, we describe our main data sources and our sampling restrictions. Throughout our analysis, we focus on all married and cohabiting individuals who (1) work and whose partner works, (2) are between 20 and 60 years of age, and (3) respond to the life satisfaction question in our datasets. We also provide robustness checks including couples where one of the spouses does not work (see Section 3, Table 2).

2.1. US data

Our US analysis first relies on the American Time Use Survey (ATUS). The ATUS is a nationally representative dataset of US adults that has been collected annually since 2003 on a sample of individuals randomly selected from a subset of households who have completed their eighth and final month of interviews for the Current Population Survey. We use this dataset because it contains rich information on how respondents and their partners use their time the day before the interview, as well as job characteristics and measures of satisfaction of the individuals. However, only one household member is asked to fill out the ATUS questionnaire

⁶ This could help to understand why, in a recent study, Foster and Stratton (2018) found that women’s promotions (and, presumably, an increase in labour market time) lead to a significant reallocation of household tasks within Australian couples. Indeed, substitution can occur within couples where both husband and wife share egalitarian views.

on behalf of his/herself. Information on the partner's characteristics are taken from the main Current Population Survey.⁷

For two waves (2012 and 2013), the ATUS also asked respondents the following self-completed, cognitive well-being question: *“Please imagine a ladder with steps numbered from zero at the bottom to ten at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. If the top step is 10 and the bottom is 0, on which step of the ladder do you feel you personally stand at the present time?”*

The sample restrictions described above produce 4,197 individuals in total. Of those, 2,176 are women and 2,021 men. Approximately 48% of the male sample work longer than their wives, and 49% of the female sample work fewer hours than their husbands. Around 39% of individuals in the full sample work the same hours as their spouses, which leaves 12% of couples whose wives work longer hours than their husbands. For descriptive statistics of all datasets used in this study, see [tables A1–A4](#) in the [appendix](#).

As an additional source of information for the United States, we also rely on the Panel Study of Income Dynamics (PSID). The PSID is a longitudinal study of a nationally representative sample of US families, including rich information on respondents' and their partners' employment, income, marriage and housework outcomes. Questions on respondents' life satisfaction were introduced in 2015–2016. Specifically, the PSID Wellbeing and Daily Life Supplement collects information on life satisfaction and satisfaction with different parts of life, including family and relationships. To be eligible for the Wellbeing and Daily Life Supplement, individuals were required to have been a household head or spouse/partner in the 2015 main PSID. The responses were based on a five-point scale from 1 (“completely satisfied”) to 5 (“not at all satisfied”) and were asked the question: *“How satisfied are you with your life as a whole these days?”*. This life satisfaction scale is similar in nature to the ATUS's life evaluation scale in that it elicits the respondent's cognitive well-being rather than their daily emotional experiences (Kahneman and Krueger, 2006).

⁷ We are aware that self-reported data about partner's time use might be problematic and may lead to systematic biases. This is likely to increase misreporting of hours. However, please note that our results are robust to excluding couples reporting the same number of working hours.

From the PSID Wellbeing and Daily Life Supplement, our sample includes 1,858 women and 1,944 men. Of those, 12% are women who work more than their husbands.

2.2. European data

We also make use of two other commonly used panel datasets: the British Household Panel Survey (BHPS) and the German Socio-Economic Panel (SOEP). Both datasets (1) provide information on the working patterns of married and cohabiting couples between 20 and 60 years of age and (2) ask respondents the question: “*How satisfied are you with your life overall?*” Specifically, we observe these couples between 1996 and 2008 in the UK and between 1995 and 2012 in Germany. The responses are based on a seven-point scale in the BHPS from 1 (“very dissatisfied”) to 7 (“very satisfied”) and on an eleven-point scale in the SOEP from 0 (“very dissatisfied”) to 10 (“very satisfied”). Note that because all of these satisfaction scales have different ranges across our four datasets, responses were standardised with mean zero and a standard deviation of 1. Using these two other datasets (BHPS and SOEP) allows us to test the robustness of our results to including individual fixed effects and to other socio-political contexts.

The sampling restrictions leave us with 4,645 women and 4,260 men for the BHPS, and 8,857 women and 8,601 men for the SOEP. Of those, 13% of the female sample work more than their husbands in the BHPS and 12% of the female sample work more than their husbands in the SOEP.

A subset of the BHPS respondents were also asked a series of questions on gender ideology, which have been intensively used by researchers (see Fortin, 2005, 2015 for a review). On a scale from 1 (“strongly agree”) to 5 (“strongly disagree”), respondents were asked to rate the following statements: “family suffers if mother works full time”, “women and family are happier if she works”, “husband and wife should both contribute to household tasks”, “full-time job makes women independent”, “husband should earn and wife should stay at home” and “children need father as much as mother”. We used these questions to produce a scale from 5 to 30, where higher scores mean more traditional gender ideologies. The frequency of responses for each item is reported in [appendix table A5](#).

3. How do relative working hours correlate with men's and women's life satisfaction?

3.1. Main results

We investigated the relationship between relative working hours within households and the life satisfaction of husbands and wives. Figure 1 shows the average life evaluation in the ATUS separately by gender and relative working hours. We consider four groups: (1) working fewer hours than partner, (2) working the same hours as partner, (3) working between 1 and 1.5 times longer than partner and (4) working more than 1.5 times longer than partner. We can see that the most satisfied women are those whose working hours are either fewer than or the same as their partners, while the least satisfied women are those who spend more than 1.5 times longer at the workplace than their husbands. By contrast, the most satisfied men out of all four groups are those who spend more than 1.5 times longer at the workplace than their wives. These aggregate numbers provide some of the first evidence that women generally report lower levels of satisfaction when working longer hours than their husbands.

In an attempt to formally test this hypothesis, we estimate the following equation:

$$\begin{aligned} LS_{i,t} = & \alpha_1 WorkMoreThanPartner_{i,t} + \alpha_2 Female_i \times WorkMoreThanPartner_{i,t} (1) \\ & + \alpha_3 EarnMoreThanPartner_{i,t} + \alpha_4 Female_i \times EarnMoreThanPartner_{i,t} \\ & + \beta' X_{i,t} + \eta_t + \phi_s + u_{i,t} \end{aligned}$$

where the dependent variable $LS_{i,t}$ is individual i 's standardised life satisfaction with mean zero and a standard deviation of 1.⁸ $WorkMoreThanPartner_{i,t}$ is an indicator variable equal to 1 if the respondent works longer hours than the spouse. $EarnMoreThanPartner_{i,t}$ is an indicator variable equal to 1 if the respondent earns more than the spouse. $Female_i \times WorkMoreThanPartner_{i,t}$ is an indicator variable equal to 1 if the wife works longer hours than the husband. $Female_i \times EarnMoreThanPartner_{i,t}$ is an indicator variable equal to 1 if the wife earns more than the husband. All regressions include a vector of socio-economic controls

⁸ Note that we also used separate samples for men and women and found consistent estimates throughout.

in time t , $X_{i,t}$, including the respondents' gender, age, age squared, the log of respondent's earning, the log of spouse's earning, the log of respondent's working hours, the log of spouse's working hours, the respondent's self-assessed health, the number of children in the household, the respondent's education and occupation dummies. State fixed effects and year fixed effects are also included. The regression models are estimated using ordinary least squares (OLS).⁹

The parameter of interest is estimated using variations in relative working hours adjusted for respondent's and spouse's working hours, respondent's and spouse's earnings and a dummy for whether respondent's earning exceeds that of spouse. Hence, the dummy variable $WorkMoreThanPartner_{i,t}$ captures the relationship between working more than spouse and respondent's life satisfaction above and beyond the effects on life satisfaction of respondent's and partner's working hours, respondent's and partner's earnings and whether respondent earns more than spouse. Correspondingly, if an increase in wife's working hours leads to a situation where the wife works longer hours than her husband, this should show up in the estimate for α_2 . Conversely, if an increase in wife's working hours is not associated with a change in relative working hours, this should not be captured in α_2 . We include respondent's and spouse's earnings, as well as an indicator variable equal to 1 if respondent earns more than spouse, to control for the possibility that the well-being patterns of respondent working more than spouse could differ significantly from those of respondent earning more than spouse (indeed, many women in our samples work more than their spouses but still earn less than 50% of the couple's total earnings; see [appendix tables A1–A4](#)).

Column 1 of [table 1](#) reports the results for females and males in the ATUS data. Consistent with the results in [figure 1](#), we find that women who work longer hours than their husbands report approximately 0.126 standard deviations lower life satisfaction than women who work fewer or the same number of hours as their husbands. Note that the dummy variable $WorkMoreThanPartner_{it}$ enters the life satisfaction regression with a coefficient of -0.004 and a standard error of 0.039, which suggests that men who spend longer hours working do not report significantly lower life evaluation scores than men who either work fewer or the same number of hours as their wives. Similarly, the coefficients on $EarnMoreThanPartner_{i,t}$ and $Female_i \times EarnMoreThanPartner_{i,t}$ – although entering the regression with negative signs –

⁹ We also replicate the results using ordered probit models; similar patterns are obtained (see [table 2](#)).

remain statistically insignificant different from zero. This suggests that relative earnings do not significantly affect either the wife's or the husband's overall well-being once we are able to hold constant the relative working hours within a household.^{10,11}

We replicate our results using the PSID, BHPS and SOEP datasets (columns 2–6 of [table 1](#)). Using these alternative datasets allows us to test whether our results are robust to different timespans and country coverage. Columns 2–6 of [table 1](#) indicate that the results hold when using these alternative datasets, although the magnitudes do vary. Women who work longer hours than their partners report 0.087 standard deviations lower life satisfaction in the PSID than women who work fewer or the same number of hours as their husbands. This is 0.052 in the BHPS and 0.044 in the SOEP, suggesting that British and German women suffer to a lesser extent from working longer hours than their husbands compared with their US counterparts. However, given that the exact definition of life satisfaction varies slightly among our four datasets and the time period is different, comparisons should be treated with care.¹²

The longitudinal nature of the British and German datasets also allows us to control for individual fixed effects in the well-being regression equations. One important threat to our identification strategy is that women working more hours than their husbands report systematically lower levels of satisfaction because they are intrinsically different from women who work fewer or the same number of hours as their husbands (e.g. in personality traits; or due to reporting bias in answering the life satisfaction question; or because they value work differently relative to other goals in life). Adding individual fixed effects allows us to difference out any potential omitted time-invariant bias and exploit within-individual variations to estimate the relationship between relative working hours and life satisfaction. Consistent with the cross-

¹⁰ Not controlling for $WorkMoreThanPartner_{it}$ does not make the dummy $EarnMoreThanPartner_{i,t}$ significant, albeit the significance level is closer to conventional levels.

¹¹ We also estimate different specifications with the controls included step by step (without controls, with job characteristics, and the complete specification) and report the results in [appendix table A6](#). Generally, we find the estimated coefficients on relative working hours to be consistently negative and statistically significant across the different specifications for females, and statistically insignificantly different from zero for males.

¹² For comparison purposes, we also replicate the results using the ATUS 2012–2013, the PSID 2015–2016, the BHPS 2007–2008 and the SOEP 2000–2012. Coefficients on the dummy $Female * WorkMoreThanPartner_{i,t}$ tend to be closer (-0.12, -0.18, -0.16 and -0.05, respectively), which suggests that some of the differences in magnitudes are because the time periods are different across our four datasets (see [appendix table A7](#)).

sectional results, we find that, for both the UK and Germany, women who start working longer hours than their husbands tend to report lower levels of well-being compared with a situation where they work fewer or the same hours as their husbands (see columns 4 and 6 of [table 1](#)). The estimated coefficients on relative working hours are almost equal for British and German women, with an effect of -0.021 ($=-0.034+0.013$) and -0.034 ($=-0.053+0.019$) respectively (while the latter is significantly different from zero at conventional levels, the former is significant only at the 17% level).

3.2. Robustness and other results

The previous section showed that women who work longer hours than their husbands tend to report lower levels of life satisfaction. The results are observed across our four datasets and remain robust to including individual fixed effects. However, given that these results could be influenced by several biases, here, we consider these potential biases one by one and provide evidence that our results hold using alternative specifications.

Our first concern is reverse causality. It could be imagined, for example, that women who are already unhappy at home may *ceteris paribus* choose to work longer hours than their husbands simply because they prefer working long hours to avoid being at home too long. In an attempt to tackle this endogeneity issue, we instrument relative working hours within household using the lag differences between working hours that had been averaged across the respondent's occupation and the partner's occupation. This strategy relies on two assumptions: first, that we can identify significant variations in relative working hours across spouses at the occupational level, which in turn affect relative working hours at the household level (first stage). Second, conditional on observables and the endogenous variable (here, relative working hours), lagged differences in working hours averaged across respondent's and partner's occupation are orthogonal to factors that might directly influence the respondent's life satisfaction. Indeed, occupational variations in working hours can result from exogenous factors above and beyond husbands' and wives' influences and, hence, entail some degree of uncertainty that makes it possible to use as an instrument. Assuming that this instrumental strategy is compelling, we

present our instrumental variables estimates in [table 2](#). First stage estimates are reported in [appendix table A8](#).¹³

Panel A replicates our baseline results from [table 1](#). Panel B indicates that the dummy variable $Female_i \times WorkMoreThanPartner_{i,t}$ continues to be negative, sizeable and statistically significant at the conventional levels when instrumented using the lagged differences in working hours averaged across respondent's and partner's occupation. The weak identification test produces large Cragg–Wald F -statistics that compare favourably to the statistics reported in Bound et al. (1995) and Stock and Yogo (2005) in columns 2, 3 and 4. The two-stage least-squares (2SLS) estimates in those columns are larger than the OLS estimates (up to two times the size of the OLS estimates), which suggests that the OLS estimates were downward biased – although the presence of measurement errors complicates the interpretation. Although the ATUS 2SLS estimate (in column 1) is qualitatively in line with the other 2SLS, it should be cautiously interpreted as the Cragg–Wald F -statistics are not large enough to discard concerns of weak instrument.¹⁴

However, it could be argued that unobserved characteristics at the occupational level are systematically associated with lagged differences in working hours across spouses, actual differences in working hours across spouses and respondent's life satisfaction (e.g. respondents who are unhappy and may happen to work in occupations that have longer working hours than their partners). To further address this concern, we present our instrumental regressions including individual fixed effects (panel C) and individual \times occupation fixed effects (panel D). The introduction of individual \times occupation fixed effects allows us to exploit time variations in lagged respondents' working hours within a given occupation relative to their partners – hence discarding the potential endogenous choice of occupation by the respondent. We find that with the introduction of individual fixed effects and individual \times occupation fixed effects, the estimated effects of working more hours for women become not statistically significant, although they remain negative and sizeable. Note that the lack of significance here is not

¹³ We also estimate instrumental variables regressions where we additionally instrument respondent's own hours, spouse's hours, and income and relative income within the household, using the lag differences between wages and hours worked that have been averaged across respondent's occupation and partner's occupation. This provides robust results.

¹⁴ This might also explain why the 2SLS estimate in the ATUS is six times larger than the OLS estimate.

surprising as only those compliers who report a change in their relative working time and occupation contribute to the estimation of our coefficients.

We run four additional sensitivity checks: (1) including quadratic terms in respondents' working hours, (2) including all married and cohabiting couples where one spouse does not work, (3) testing for differential levels in well-being before increases in relative working hours and (4) replicating our baseline results using nonlinear models.

Despite our attempts to control for husbands' and wives' working hours, most men in the United States, UK and Germany work full time and more hours on average than their wives. Hence, men whose wives work comparatively longer hours are likely to be those whose wives work extraordinarily long hours. A nonlinear relationship between working hours and life satisfaction would therefore explain why women report lower levels of satisfaction. We address this possibility in panel E, [table 2](#), by including quadratic terms in working hours. The coefficients on $Female_i \times WorkMoreThanPartner_{i,t}$ appear very similar to those reported in [table 1](#), with values ranging from -0.027 in Germany to -0.180 in the United States.

Another concern may be that our decision to select only married and cohabiting couples where both respondent and partner work might bias our estimates. Indeed, many women in the United States, UK and Germany do not work at all and are likely to be very different from women who work and whose partner works. Panel F displays our baseline results including all married and cohabiting couples in the United States, UK and Germany where one spouse does not work (either men or women). Our estimates do vary, but remain qualitatively the same.

The third sensitivity test examines the development of life satisfaction before and after working more hours than spouse. The purpose of this is to test for differential trends in life satisfaction that can indicate sorting of individuals with higher levels of life satisfaction into working more than their spouse. We run regressions including relative working hours lagged one and two years in the main specifications using the British and German samples. The results in panel G indicate that women who start working more hours than their spouse did not report lower levels of life satisfaction in the previous years, hence providing evidence against the idea that women who are already unhappy choose to work longer hours.

A fourth and final robustness check shows that our results are not sensitive to the use of ordered probit models (see panel H of [table 2](#)). Overall, we can conclude that these results are consistent with women reporting lower levels of life satisfaction when working more hours than their husbands with little effects from endogenous preferences towards working, sample selection biases, women's distaste for working long hours or sorting of women with lower levels of life satisfaction into working more than their spouse.

4. Does the household division of labour drive these relationships?

Why do women suffer more than men from working longer hours than their partner? In this section, we provide evidence that the unequal division of labour in the household may explain part of these negative effects.

4.1. Relative working hours and the household division of labour

We first explore the household division of labour among US couples according to their relative working hours. Using the ATUS data, we can see in [figures 2a](#) and [2b](#) that women still spend more time than their husbands in household chores, regardless of the number of hours that they work. Women who work longer than their husbands still spend, on average, 137 minutes per day on household tasks, which is approximately 39 minutes longer than men who work fewer or the same hours as their wives and only 25 minutes less than women who work fewer or the same hours as their husbands. According to [figures 2a](#) and [2b](#), there is also little difference in the time spent on household tasks between men who work fewer or the same hours as their partners and men who work longer hours than their partners. On average, men who work fewer or the same hours as their partners spend 98 minutes per day on household tasks, whereas men who work longer hours than their partners spend 93 minutes per day on household tasks.¹⁵

A more direct test of the absence of relationship between relative working hours and the division of household tasks between men and women is to run the following regression:

¹⁵ Note that by contrast, men increase their time spent on leisure activities as a result of working fewer/the same hours as their wives.

$$\begin{aligned}
\text{LogHHTasks}_{i,t} = & \gamma_1 \text{WorkMoreThanPartner}_{i,t} + \gamma_2 \text{Female}_i \times \text{WorkMoreThanPartner}_{i,t} \\
& + \gamma_3 \text{EarnMoreThanPartner}_{i,t} + \gamma_4 \text{Female}_i \times \text{EarnMoreThanPartner}_{i,t} \\
& + \beta' X_{i,t} + \eta_t + \phi_s + u_{i,t}
\end{aligned} \tag{2}$$

where $\text{LogHHTasks}_{i,t}$ is the log of individual i 's hours spent on household tasks. All of the other variables are defined as before. The regressions include the same set of socio-economic controls, $X_{i,t}$. The regression models are estimated using OLS.

Table 3 reports the results using the ATUS data. Consistent with figures 2a and 2b, we find that women spend significantly more time doing household tasks than men, on average. This is remarkably stable, with women spending twice $(\exp(0.719)-1)*100\%=105.23$ the amount of time on household tasks than men, on average. We also find little evidence to suggest that women who work longer hours than their husbands spend significantly less time doing household tasks than women who work fewer or the same hours as their husbands. The estimated difference is statistically insignificantly different from zero. These results thus confirm that among couples where women work more than their husbands, an increase in the relative working hours between spouses does not significantly affect the household division of labour compared with couples where women work fewer or the same hours as their husbands. Note that we do not find any significant estimate for other types of activities (see columns 2 and 3 of table 3).¹⁶

4.2. Interaction effects between relative working hours and time spent on household tasks

Many studies in sociology have suggested that the wife's perception of fairness with respect to the household division of labour depends on (1) the total amount of housework performed by the wife, (2) the husband's contribution to household tasks and (3) the gender ideologies hold by both husband and wife (see Thompson's (1991) distributive justice framework). Here, we contribute to the literature by investigating whether wives' perception of fairness is significantly

¹⁶ We also replicate our results using the number of hours spent doing household tasks, leisure or personal care instead of the logarithms; similar results are obtained (see appendix table A9).

driven by the number of hours they work in the labour market relative to that of their husbands and the corresponding amount of household tasks they perform.

To do so, we use the ATUS data and estimate the following equation:

$$\begin{aligned}
LS_{i,t} = & \delta_1 Female_i + \delta_2 WorkMoreThanPartner_{i,t} + \delta_3 LogHHTasks_{i,t} + \delta_4 Female_i \times \\
& WorkMoreThanPartner_{i,t} + \delta_5 Female_i \times LogHHTasks_{i,t} + \\
& \delta_6 WorkMoreThanPartner_{i,t} \times LogHHTasks_{i,t} + \delta_7 Female_i \times \\
& WorkMoreThanPartner_{i,t} \times LogHHTasks_{i,t} + \delta_7 EarnMoreThanPartner_{i,t} + \\
& \delta_8 Female_i \times EarnMoreThanPartner_{i,t} \\
& + \beta' X_{i,t} + \eta_t + \phi_s + u_{i,t}
\end{aligned} \tag{3}$$

Equation (3) replicates Equation (1) but controlling for the log of time spent doing household chores. We also include a triple interaction between $Female_i$, $WorkMoreThanPartner_{i,t}$, and $LogHHTasks_{i,t}$, as well as the full set of double interaction terms. If the loss in women's well-being is because they are working more than their husbands *and* because they spend a significant amount of time doing household tasks, we should expect δ_4 not to be negative anymore and δ_7 to attract a negative and significant coefficient.

Table 4 reports the results. As predicted above, the main effect of $Female_i \times WorkMoreThanPartner_{i,t}$, becomes statistically insignificant or even positive, and its interaction effect with $LogHHTasks_{i,t}$ is negative and sizeable. This suggests that women's dissatisfaction from working longer hours is significantly driven by the number of hours they spend doing domestic chores. The net effect of doubling the time spent in household chores for women working more hours than their partners is negative and significant ($\delta_3 + \delta_5 + \delta_6 + \delta_7 = -0.064$, with standard errors equal to 0.029), while this is not significant ($\delta_3 + \delta_5 = 0.009$, with standard errors equal to 0.012) for women working fewer or the same number of hours than their partners.

We also re-estimate these specifications including another set of interaction terms between $Female_i \times LogWorkingHours_{i,t}$ and $LogHHTasks_{i,t}$. The results in column 2 of table 4 show that the negative effect on women's well-being is concentrated in couples where women work more

hours than their husbands *and* spend a significant amount of time doing household chores. Strikingly, we find no significant effect for the interaction between $Female_i \times LogWorkingHours_{i,t}$ and $LogHHTasks_{i,t}$, which suggests that in couples where the wife works long hours and does most of the housework, there is no decrease in her life satisfaction *as long as she does not work longer hours than her husband*.¹⁷

These results point to the importance of the division of labour in household tasks as an explanation of women's dissatisfaction from working more hours than their husbands. More importantly, it indicates that women's dissatisfaction is driven by the fact that they are working more hours than their husbands and as a result of this difference in working hours, they expect their husbands to make some substitution by increasing their participation in household chores to compensate for their extra time in the labour market. However, it appears that their husbands' behaviours generally do not match their expectations, thus contributing to women feeling dissatisfied as a result.

We next distinguish between the different types of household tasks. The literature acknowledges that routine tasks differ from recreational tasks in that males tend to devote more and more time to the latter but not to the former (Aguiar and Hurst, 2007). Column 3 of [table 4](#) introduces the distinction by interacting the dummy “working longer hours than partner” with the “log of routine tasks” and the “log of recreational tasks” separately.¹⁸ We notice that life satisfaction is statistically significantly lower among only those women who spend a significant amount of time doing routine tasks and who work longer than their husbands. Working more than the husband and doing recreational tasks is not associated with lower life satisfaction. One important implication of these findings could be that women in couples that outsource home production (and especially routine tasks) may happen to be less dissatisfied from working more hours than their husbands. To corroborate this idea, Fleche et al. (2018) provides evidence using

¹⁷ Please note that the results presented in [table 4](#) also hold for non-logged household task variables (see [appendix table A10](#)).

¹⁸ Routine tasks are housecleaning, cooking, grocery shopping, yard care, pet care, vehicle maintenance, repair, home repair and renovation and household management activities (e.g. paperwork, mail). Recreational tasks are all child-caring activities (e.g. playing indoors and outdoors, socialising, talking, teaching, singing).

the PSID Wellbeing and Daily Life Supplement that women's dissatisfaction is significantly alleviated by having access to household services.¹⁹

Finally, [appendix table A11](#) provides additional evidence using the British and German data that women who work longer hours than their husbands also report lower levels of satisfaction with their house/flat, partner and family, which corroborates the idea that women's dissatisfaction is partially driven by the unequal division of labour at home.²⁰

5. Gender ideologies as a moderating factor

Working longer hours than their spouse is associated with lower levels of well-being for women, but not for men. The unequal division of labour, which implies that women still perform most of the household tasks, is likely to drive, in part, these negative effects. We conclude our paper by investigating whether the well-being losses associated with working longer hours are concentrated in households *where women hold less traditional gender ideologies on average*. Such an explanation has a number of attractive features. It explains why women whose working hours have increased expect their husbands to share the domestic workload and increase their participation in household tasks. It also explains why egalitarian wives married to more traditional husbands become dissatisfied by what they perceive as their husbands being unhelpful at home. Finally, it also corroborates the idea that husbands' gender ideologies have not kept pace with those of their wives in the shift from traditional ideologies to more egalitarian beliefs, and therefore, husbands hold more traditional views on average than their wives with respect to gender roles (see Greenstein, 1996a).

¹⁹ We also show in [appendix tables A12 and A13](#) that the effect of working more than the partner is stronger for women who are born after 1965 and have young children. This is line with the results in [table 4](#), as it is those women who are arguably the ones spending more time on household chores.

²⁰ We also provide suggestive evidence in [appendix table A14](#) that women's propensity to opt out from the labour market, or to reduce their labour supply if they do decide to work, is higher in couples where the wife's working hours exceed those of the husband. These findings support the idea that women who have the opportunity to work longer than their husbands may, paradoxically, find it optimal to cut their labour supply to avoid perceiving the current division of household work as unfair. As for those women who remain in the labour market and whose working hours exceed those of their husbands, we also find the probability that partners will either separate or divorce in year $t+1$ to be statistically significantly higher among couples where the wife works longer hours than the husband.

With increasing educational attainments and increasing labour force participation, previous works have shown that women have tended to report more egalitarian views over the last 70 years (Rogers and DeBoer, 2001; Eirich and Robinson, 2017).²¹ McGinn et al. (2019) argue that women with working mothers during childhood and with egalitarian gender attitudes are in fact significantly more likely to work and, consequently, to work longer hours than their partners. What this means is that women who outwork their husbands are also likely to be women who are less constrained by gender norms and more concerned by fairness of household chores.

The BHPS data allow us to specifically test this hypothesis. Using household members' responses on gender ideologies, we first check whether individuals' attitudes towards traditional gender norms are significantly moderated by relative working hours within households. We find in [appendix table A15](#) that women who work longer hours than their husbands are consistently more egalitarian than women who work fewer or the same number of hours as their husbands. For example, in the “full-time job makes women independent” regression, women who work longer hours than their husbands score 0.13 standard deviations higher in terms of agreement with this statement than women who work fewer or the same number of hours as their husbands. Similarly, women who work longer hours than their husbands are 0.070 standard deviations more likely to agree with the statement that “husband and wife should both contribute”. These results thus confirm the idea that women who work more hours than their husbands tend to hold more egalitarian views on average than their female counterparts. Of course, it could be the case that working more hours means that women are more likely to hold and state more progressive attitudes (Beblo and G6rges, 2018). Moreover, previous research has already highlighted that individuals' gender role attitudes and behaviours may not be consistent (Schober and Scott, 2012). Therefore, these survey responses are seen as only suggestive evidence.

However, we can use them to specifically test our hypothesis that women's dissatisfaction from working longer hours will be concentrated in couples where women hold more egalitarian views on average. We return to our main specification of [table 1](#), but have divided our sample into four groups: (1) traditional husbands with traditional wives, (2) egalitarian husbands with egalitarian wives, (3) traditional husbands with egalitarian wives and (4) egalitarian husbands with traditional wives. To do so, we have used the previous ideologies question to reproduce a

²¹ See also Fortin (2005), Cotter et al. (2011), Farr6 and Vella (2013) and Arpino et al. (2015).

scale where higher scores mean more traditional gender ideologies. Respondents with an average score above (below) the median are considered to be traditional (egalitarian). Results are presented in [table 5](#). Looking across the columns, we find that women who work longer hours than their husbands and who are on average more egalitarian report lower life satisfaction scores than women who work longer hours than their husbands and who hold more traditional views. As expected, this implies that more egalitarian women who work longer hours than their husbands are the ones who significantly suffer from this division of labour within the household. [Table 5](#) also provides evidence that women who hold egalitarian views and whose husbands hold more traditional views are consistently the most dissatisfied women. Of course, this does not imply that if women who hold more traditional views do not report significantly lower satisfaction, then they do not suffer from going against their own gender norms. They may, for instance, prefer to perform more household tasks to assuage their unease with the situation, hence compensating for their loss in well-being by allocating housework responsibilities unequally at home.

6. Conclusions

This paper contributes to a growing literature showing that despite significant gains in female educational achievement and labour force participation, there remain significant barriers to women's progression in the labour market. Our main contribution is to provide evidence that women who choose to work longer hours than their husbands report systematically lower levels of life satisfaction. These results hold in individual fixed-effect regressions and are obtained from three different settings using US, UK and German data.

We rationalise this behaviour by looking at the division of household tasks. One implication is that because women who work longer hours continue to perform most of the domestic chores, they become overwhelmed and dissatisfied. In the final part of the paper, we added further evidence suggesting that such perceived unfairness of the division of household tasks is found if and only if women who outwork their husbands hold more egalitarian views.

We offer two suggestions for future work. First, given that men do not generally perform more household tasks to compensate for working fewer hours than their wives, do women anticipate

this lack of substitution when increasing their number of working hours? And if not, what explains their incorrect prediction of this mismatch in their partner's behaviour? Second, *what* constrains men from adopting less traditional gender norms and doing more household tasks to compensate their wives' time on the labour market? Of course, we cannot rule out the possibility that even if women consistently report more egalitarian views, they could also suffer from going against their own traditional gender norms by working more hours than their husbands and may, paradoxically, prefer to perform more household tasks to assuage their husbands' unease with the situation (Bertrand et al., 2015).

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Figures

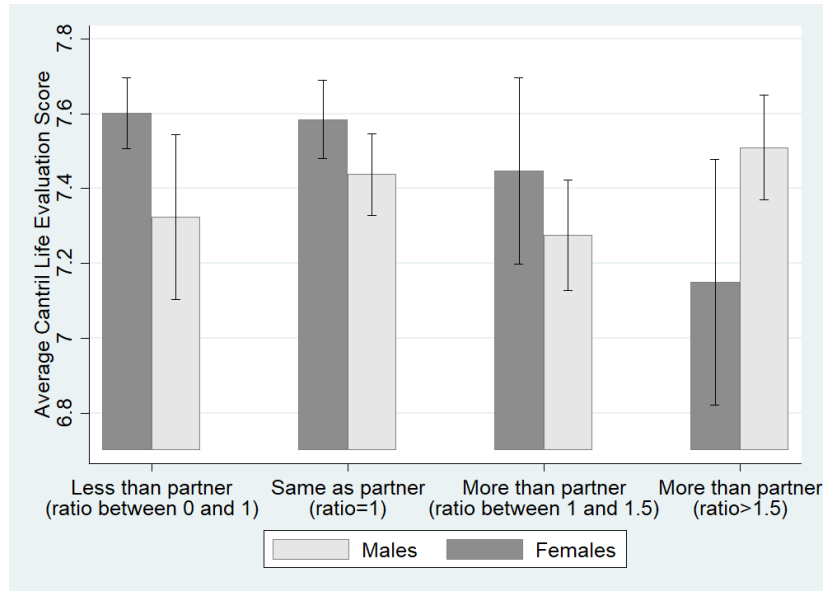


FIGURE 1. RAW DATA CORRELATIONS BETWEEN LIFE EVALUATION AND RELATIVE WORK HOURS BY GENDER: ATUS, 2012-2013.

Un-standardised life evaluation score is measured on an 11-point scale that ranges from 0 (the worst possible life) to 20 (the best possible life). The ratio of hours work between spouses is equal to the individual's own usual work hours over the spouse's usual work hours. 90% standard-error bars are reported (1 S.E. above, 1 S.E. below).

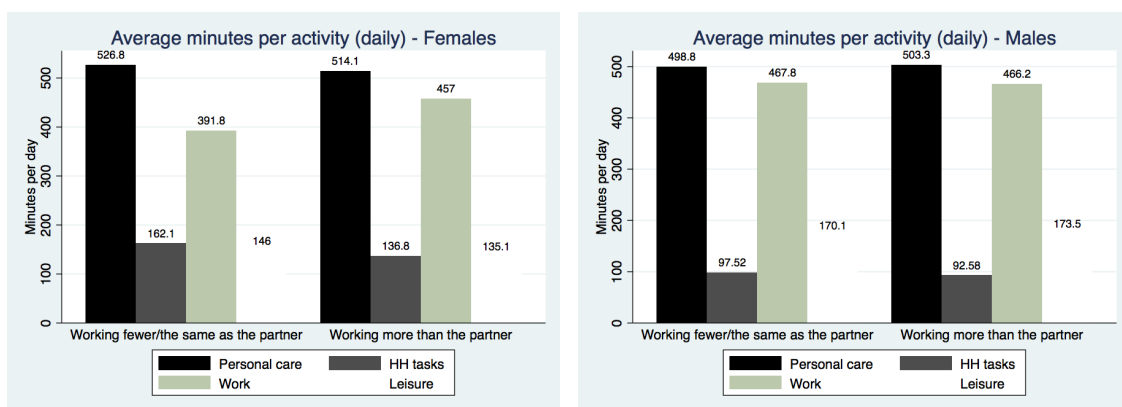


FIGURE 2. TIME USE: ATUS (2012-2013)

The figure represents the average time per activity computed from the American Time Use Survey

Tables

TABLE 1. LIFE SATISFACTION AND RELATIVE WORKING HOURS AMONG COUPLES (OLS and FE): ATUS, PSID, BHPS, SOEP

	ATUS (2012-2013)	PSID (2015-2016)	BHPS (1996-2008)	SOEP (1995-2012)		
	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable: <i>life satisfaction</i>						
<i>Female</i>	0.076* (0.040)	0.149*** (0.066)	0.092*** (0.020)		0.109*** (0.011)	
<i>WorkMoreThanPartner</i>	-0.004 (0.039)	0.093 (0.062)	0.035* (0.037)	0.013 (0.019)	-0.018* (0.011)	0.019* (0.011)
<i>WorkMoreThanPartner</i> × <i>Female</i>	-0.123** (0.062)	-0.180** (0.083)	-0.088*** (0.022)	-0.034 (0.023)	-0.027* (0.015)	-0.053*** (0.016)
<i>EarnMoreThanPartner</i>	-0.012 (0.043)	0.061 (0.062)	-0.018 (0.017)	0.005 (0.019)	0.076*** (0.011)	0.026* (0.030)
<i>EarnMoreThanPartner</i> × <i>Female</i>	-0.020 (0.054)	-0.074 (0.081)	-0.007 (0.021)	0.001 (0.025)	-0.118*** (0.015)	-0.076*** (0.019)
<i>lnOwnworkinghours</i>	0.009 (0.038)	0.062** (0.031)	-0.166*** (0.017)	-0.048** (0.020)	-0.160*** (0.010)	-0.038*** (0.012)
<i>N</i>	4,197	3,802	40,947	40,947	83,231	83,231
<i>R</i> ²	0.110	0.124	0.036	0.603	0.213	0.638
Individual FE	No	No	No	Yes	No	Yes
Total implied effects:						
<i>Male working less hours</i>	--	--	--		--	
<i>Male working more hours</i>	-0.004 (0.039)	0.093 (0.062)	0.035* (0.037)		-0.018* (0.011)	
<i>Female working less hours</i>	0.076* (0.040)	0.149*** (0.066)	0.092*** (0.020)		0.109*** (0.011)	
<i>Female working more hours</i>	-0.050 (0.062)	0.062 (0.082)	0.039* (0.022)		0.065*** (0.015)	
<i>Female working more – Female working less</i>	-0.126** (0.053)	-0.087 (0.060)	-0.052*** (0.014)		-0.044*** (0.012)	

Notes: *** significant at the 1% level, ** significant at the 5% level and * significant at the 10% level.

The data are from the ATUS, 2012-2013; the PSID, 2015-2016; the BHPS, 1996-2008 and the SOEP 1995-2012. All dependent variables are standardized to have a mean of 0 and a standard deviation of 1. Regressions are estimated using linear models. Columns (4) and (6) include individual fixed effects. Additional controls include the log of respondent's working hours, the log of spouse's working hours, the log of respondent's earnings, the log of spouse's earnings, respondent's age, age-squared, self-assessed health, education dummies, occupation dummies, the number of children, state/region fixed effects, and year fixed effects. *EarnMoreThanPartner* is an indicator variable that equals to 1 if *shareIncome* > 0.5 at time t. *shareIncome* is the share of the household income earned by the respondent. *WorkMoreThanPartner* is an indicator variable that equals to 1 if *relativeWorking* > 0.5 at time t. *relativeWorking* is the share of the household working hours worked by the respondent. Robust standard errors are in parentheses.

TABLE 2. LIFE SATISFACTION AND RELATIVE WORKING HOURS AMONG COUPLES (ROBUSTNESS):
ATUS, PSID, BHPS, SOEP

	ATUS (2012-2013) (1)	PSID (2015-2016) (2)	BHPS (1996-2008) (3)	SOEP (1995-2012) (4)
Dependent variable: <i>life satisfaction</i>				
Panel A: OLS				
<i>WorkingMoreThanPartner</i> × <i>Female</i>	-0.123** (0.062)	-0.180** (0.083)	-0.088*** (0.022)	-0.027* (0.015)
<i>N</i>	4,197	3,802	40,947	83,231
<i>R</i> ²	0.110	0.124	0.036	0.213
Panel B: IV				
<i>WorkingMoreThanPartner</i> × <i>Female</i>	-0.826* (0.490)	-0.389** (0.174)	-0.177*** (0.079)	-0.033 (0.038)
<i>N</i>	4,197	3,802	40,947	83,231
<i>R</i> ²	0.027	0.037	0.035	0.217
Cragg-Donald Wald F-Statistic	5.374	273.661	423.948	1562.10
Panel C: IV with individual FE				
<i>WorkingMoreThanPartner</i> × <i>Female</i>			-0.017 (0.100)	-0.052 (0.051)
<i>N</i>			40,947	83,231
<i>R</i> ²			171.306	900.276
Panel D: IV with individual*occup FE				
<i>WorkingMoreThanPartner</i> * <i>Female</i>			-0.089 (0.108)	-0.078 (0.053)
<i>N</i>			40,947	83,231
<i>R</i> ²			154.463	880.029
Panel E: Including quadratic terms in working hours				
<i>WorkingMoreThanPartner</i> × <i>Female</i>	-0.123** (0.062)	-0.180** (0.083)	-0.089*** (0.022)	-0.027* (0.015)
<i>N</i>	4,197	3,802	40,947	83,231
<i>R</i> ²	0.110	0.124	0.036	0.213
Panel F: Including non-working individuals				
<i>WorkingMoreThanPartner</i> × <i>Female</i>	-0.096 (0.071)	-0.172** (0.082)	-0.107*** (0.022)	-0.049*** (0.015)
<i>N</i>	4,211	4,414	41,465	85,069
<i>R</i> ²	0.112	0.117	0.034	0.210
Panel G: Including relative working hours in t-1 and t-2				
<i>WorkingMoreThanPartner</i> × <i>Female</i> in <i>t</i>			-0.088*** (0.022)	-0.033** (0.015)
<i>WorkingMoreThanPartner</i> × <i>Female</i> in <i>t-1</i>			-0.060 (0.070)	-0.005 (0.052)
<i>WorkingMoreThanPartner</i> × <i>Female</i> in <i>t-2</i>			0.076 (0.080)	0.024 (0.058)
<i>N</i>			40,947	83,231
<i>R</i> ²			0.036	0.213
Panel H: Ordered probit models				
<i>WorkingMoreThanPartner</i> × <i>Female</i>	-0.170** (0.085)	-0.194** (0.095)	-0.117*** (0.029)	-0.029 (0.020)
<i>N</i>	4,197	3,802	40,947	83,231
Pseudo- <i>R</i> ²	0.032	0.060	0.014	0.068

Notes: *** significant at the 1% level, ** significant at the 5% level and * significant at the 10% level.

Robustness checks are described in detail in the text. The data are from the ATUS, 2012-2013; the PSID, 2015-2016; the BHPS, 1996-2008 and the SOEP 1995-2012. All dependent variables are standardized to have a mean of 0 and a standard deviation of 1. Regressions are estimated using linear models. Additional controls include the log of respondent's working hours, the log of spouse's working hours, the log of respondent's earnings, the log of spouse's earnings, respondent's age, age-squared, self-assessed health, education dummies, occupation dummies, the number of children, state/region fixed effects, and year fixed effects. Controls also include *EarnMoreThanPartner*, an indicator variable that equals to 1 if *shareIncome* > 0.5 at time *t* and *shareIncome*, the share of the household income earned by the respondent. *WorkMoreThanPartner* is an indicator variable that equals to 1 if *relativeWorking* > 0.5 at time *t*. *relativeWorking* is the share of the household working hours worked by the respondent. Robust standard errors are in parentheses.

TABLE 3. ACTIVITY PER DAY AND RELATIVE WORKING HOURS
AMONG COUPLES (OLS): ATUS (2012-2013)

Dependent variables:	<i>Log household</i>	<i>Log</i>	<i>Log</i>
	<i>tasks</i>	<i>leisure</i>	<i>personal care</i>
	(1)	(2)	(3)
<i>Female</i>	0.719*** (0.090)	-0.204*** (0.075)	0.069*** (0.012)
<i>WorkMoreThanPartner</i>	-0.157* (0.089)	-0.164** (0.075)	-0.013 (0.012)
<i>WorkMoreThanPartner</i> × <i>Female</i>	0.034 (0.141)	0.083 (0.118)	-0.012 (0.019)
<i>EarnMoreThanPartner</i>	0.020 (0.099)	-0.034 (0.083)	0.020 (0.013)
<i>EarnMoreThanPartner</i> × <i>Female</i>	-0.009 (0.123)	-0.098 (0.103)	-0.025 (0.017)
<i>InOwnworkinghours</i>	-0.168** (0.086)	-0.191*** (0.072)	-0.013 (0.012)
<i>N</i>	4,197	4,197	4,197
<i>R</i> ²	0.147	0.083	0.122
Total implied effects:			
<i>Male working less hours</i>	--	--	--
<i>Male working more hours</i>	-0.157* (0.089)	-0.164** (0.075)	-0.013 (0.012)
<i>Female working less hours</i>	0.719*** (0.090)	-0.204*** (0.075)	0.069*** (0.012)
<i>Female working more hours</i>	0.596*** (0.142)	-0.285*** (0.119)	0.044** (0.012)
<i>Female working more – Female working less</i>	-0.123 (0.122)	-0.080 (0.103)	-0.025 (0.017)

Notes: *** significant at the 1% level, ** significant at the 5% level and * significant at the 10% level.

The data are from the ATUS, 2012-2013. Dependent variables are the log of respondent's hours spent doing household tasks in an average day, having leisure and doing personal care. Regressions are estimated using linear models. Additional controls include the log of respondent's working hours, the log of spouse's working hours, the log of respondent's earnings, the log of spouse's earnings, respondent's age, age-squared, self-assessed health, education dummies, occupation dummies, the number of children, state fixed effects, and year fixed effects. Robust standard errors are in parentheses.

TABLE 4. LIFE SATISFACTION AND INTERACTION BETWEEN TIME USE AND RELATIVE WORKING HOURS AMONG COUPLES (OLS): ATUS (2012-2013)

Dependent variable:	<i>Life satisfaction</i>		
	(1)	(2)	(3)
<i>Female</i>	-0.012 (0.082)	-0.376 (0.749)	0.015 (0.074)
<i>WorkMoreThanPartner</i>	-0.073 (0.076)	-0.094 (0.082)	-0.048 (0.069)
<i>LnHHtasks</i>	-0.011 (0.012)	0.062 (0.123)	
<i>WorkMoreThanPartner</i> × <i>Female</i>	0.277* (0.167)	0.218 (0.177)	0.271* (0.145)
<i>LnHHtasks</i> × <i>Female</i>	0.020 (0.017)	0.095 (0.152)	
<i>WorkMoreThanPartner</i> × <i>LnHHtasks</i>	0.017 (0.017)	0.021 (0.018)	
<i>WorkMoreThanPartner</i> × <i>Female</i> × <i>LnHHtasks</i>	-0.091** (0.035)	-0.078** (0.037)	
<i>EarnMoreThanPartner</i>	-0.012 (0.043)	-0.012 (0.044)	-0.012 (0.043)
<i>EarnMoreThanPartner</i> × <i>Female</i>	-0.018 (0.054)	-0.018 (0.054)	-0.018 (0.054)
<i>lnOwnworkinghours</i>	0.010 (0.038)	0.111 (0.157)	0.008 (0.038)
<i>lnOwnworkinghours</i> × <i>Female</i> × <i>LnHHtasks</i>		-0.022 (0.042)	
<i>LnRoutineTasks</i>			-0.014 (0.011)
<i>LnRecreationTasks</i>			0.009 (0.011)
<i>WorkMoreThanPartner</i> × <i>LnRoutineTasks</i>			0.010 (0.016)
<i>WorkMoreThanPartner</i> × <i>LnRecreationTasks</i>			0.006 (0.016)
<i>LnRoutineTasks</i> × <i>Female</i>			0.021 (0.015)
<i>LnRecreationTasks</i> × <i>Female</i>			-0.009 (0.013)
<i>WorkMoreThanPartner</i> × <i>Female</i> × <i>LnRoutineTasks</i>			-0.085*** (0.033)
<i>WorkMoreThanPartner</i> × <i>Female</i> × <i>LnRecreationTasks</i>			-0.033 (0.026)
<i>N</i>	4,197	4,197	4,197
<i>R</i> ²	0.110	0.112	0.113

Notes: *** significant at the 1% level, ** significant at the 5% level and * significant at the 10% level. The data are from the ATUS, 2012-2013. Dependent variables are the log of respondent's hours spent doing household tasks in an average day, having leisure and doing personal care. Regressions are estimated using linear models. Additional controls include the log of respondent's working hours, the log of spouse's working hours, the log of respondent's earnings, the log of spouse's earnings, respondent's age, age-squared, self-assessed health, education dummies, occupation dummies, the number of children, state fixed effects, and year fixed effects. Robust standard errors are in parentheses.

TABLE 5. LIFE SATISFACTION, GENDER IDEOLOGY AND RELATIVE WORKING HOURS
AMONG COUPLES: BHPS (1997-2007)

	Husband = T, Wife = T	Husband = E, Wife = E	Husband = T, Wife = E	Husband = E, Wife = T
	(1)	(2)	(3)	(4)
Dependent variable: <i>life satisfaction</i>				
<i>Female</i>	0.135 (0.099)	0.052 (0.050)	-0.031 (0.051)	0.208* (0.116)
<i>WorkMoreThanPartner</i>	-0.146 (0.094)	0.029 (0.043)	0.029 (0.039)	0.024 (0.103)
<i>WorkMoreThanPartner</i> × <i>Female</i>	0.073 (0.110)	-0.146*** (0.053)	-0.209*** (0.075)	-0.072 (0.106)
<i>EarnMoreThanPartner</i>	0.271*** (0.088)	-0.008 (0.040)	0.004 (0.036)	0.095 (0.089)
<i>EarnMoreThanPartner</i> × <i>Female</i>	-0.239** (0.103)	0.018 (0.050)	0.124* (0.073)	-0.042 (0.092)
<i>lnOwnworkinghours</i>	-0.070 (0.094)	-0.185*** (0.032)	-0.250*** (0.053)	-0.103** (0.052)
<i>N</i>	2,025	9,571	5,322	5,381
<i>R</i> ²	0.074	0.043	0.069	0.045

Notes: *** significant at the 1% level, ** significant at the 5% level and * significant at the 10% level.

The data are from the BHPS, 1997-2007. All dependent variables are standardized to have a mean of 0 and a standard deviation of 1. Regressions are estimated using linear models. Additional controls include the log of respondent's working hours, the log of spouse's working hours, the log of respondent's earnings, the log of spouse's earnings, respondent's age, age-squared, self-assessed health, education dummies, occupation dummies, the number of children, state/region fixed effects, and year fixed effects. Robust standard errors are in parentheses.

Online Appendix

TABLE A1. DESCRIPTIVE STATISTICS: ATUS (2012-2013)

	Husband working:			Wife working:		
	More than wife	As much as wife	Less than wife	More than husband	As much as husband	Less than husband
Cantril ladder	7.388 (1.625)	7.438 (1.573)	7.324 (1.749)	7.359 (1.670)	7.585 (1.542)	7.602 (1.580)
Respondent's working hours	303.3 (282.4)	264.1 (272.1)	239.5 (258.0)	293.9 (264.4)	226.0 (247.3)	180.9 (229.4)
Respondent's gross income	133528.3 (70481.6)	116664.8 (62615.1)	100022.6 (64955.9)	114276.3 (66623.3)	98152.3 (53833.2)	72427.8 (51970.1)
Share of wife's income	0.344 (0.156)	0.455 (0.133)	0.537 (0.154)	0.560 (0.162)	0.466 (0.129)	0.348 (0.157)
Self-assessed health	2.261 (0.873)	2.315 (0.888)	2.242 (0.944)	2.156 (0.899)	2.229 (0.911)	2.206 (0.910)
Education	3.085 (1.019)	3.056 (1.040)	3.074 (1.024)	3.433 (0.901)	3.280 (0.982)	3.270 (0.977)
Age	42.85 (9.024)	42.53 (9.025)	43.09 (9.960)	42.56 (9.394)	41.55 (9.135)	41.69 (9.154)
Partner's working hours	30.32 (11.47)	40.85 (3.756)	48.18 (10.95)	34.29 (11.02)	40.80 (4.062)	47.82 (10.84)
Partner's gross income	70942.6 (50512.7)	97679.1 (57090.7)	111667.8 (67372.1)	93684.0 (62657.5)	114638.5 (62723.3)	131455.3 (66090.6)
Number of Children	1.370 (1.098)	1.208 (1.065)	1.107 (1.064)	1.130 (1.091)	1.150 (1.024)	1.406 (1.080)
<i>N</i>	975	802	244	270	833	1073

Notes: Standard deviations are in parentheses.

TABLE A2. DESCRIPTIVE STATISTICS: PSID (2015-2016)

	Husband working:			Wife working:		
	More than wife	As much as wife	Less than wife	More than husband	As much as husband	Less than husband
Satisfaction	3.853 (0.919)	3.812 (0.765)	3.688 (0.863)	3.909 (0.890)	3.735 (0.820)	3.805 (0.784)
Respondent's working hours	2175.0 (370.3)	2357.7 (614.5)	1685.7 (606.5)	2157.4 (368.4)	2145.3 (611.6)	1539.0 (644.4)
Respondent's income	55934.8 (52083.2)	75553.0 (88114.4)	51187.2 (59676.9)	46656.1 (27458.9)	53923.7 (42250.5)	37723.2 (30898.7)
Share of respondent's income	0.518 (0.143)	0.732 (0.239)	0.431 (0.196)	0.485 (0.151)	0.691 (0.253)	0.362 (0.215)
Education	1.132 (0.454)	1.155 (0.571)	1.138 (0.485)	1.258 (1.057)	1.113 (0.549)	1.067 (0.404)
Age	43.62 (8.901)	43.19 (9.203)	42.67 (9.307)	43.76 (8.868)	44.39 (9.948)	42.30 (9.155)
Partner's working hours	2175.0 (370.3)	1141.0 (866.0)	2251.7 (504.5)	2157.4 (368.4)	1243.3 (912.3)	2392.7 (551.3)
Partner's income	44607.4 (23914.6)	27264.1 (30260.0)	56964.4 (37178.4)	56462.6 (52864.0)	35565.4 (42474.7)	74353.8 (67552.6)
Number of Children	1.044 (1.112)	1.232 (1.125)	0.965 (1.076)	1.000 (1.123)	0.870 (1.061)	1.217 (1.111)
<i>N</i>	68	1478	398	66	600	1192

Notes: Standard deviations are in parentheses.

TABLE A3. DESCRIPTIVE STATISTICS: BHPS (1996-2008)

	Husband working:			Wife working:		
	More than wife	As much as wife	Less than wife	More than husband	As much as husband	Less than husband
Life satisfaction	5.322 (0.964)	5.291 (1.020)	5.299 (1.025)	5.318 (1.074)	5.297 (1.055)	5.360 (1.089)
Respondent's working hours	37.59 (3.460)	40.91 (7.143)	34.04 (7.727)	37.57 (3.887)	38.42 (8.305)	26.06 (9.822)
Respondent's income	1973.4 (1012.5)	2104.4 (1377.4)	1812.1 (1268.6)	1605.8 (830.4)	1601.3 (1046.1)	1014.6 (766.3)
Share of respondent's income	0.552 (0.114)	0.684 (0.153)	0.533 (0.165)	0.454 (0.116)	0.494 (0.169)	0.343 (0.180)
Self-assessed health	0.457 (0.498)	0.461 (0.498)	0.466 (0.499)	0.561 (0.496)	0.525 (0.499)	0.536 (0.499)
Education	3.925 (1.659)	4.381 (1.671)	4.043 (1.699)	4.067 (1.720)	4.036 (1.701)	4.536 (1.620)
Age	38.38 (9.851)	40.85 (9.520)	39.55 (10.57)	37.12 (9.817)	38.41 (10.78)	39.81 (9.732)
Partner's working hours	37.59 (3.460)	25.58 (10.13)	40.61 (8.461)	37.57 (3.887)	29.92 (12.27)	42.34 (8.861)
Partner's income	1593.9 (875.0)	997.6 (781.2)	1576.5 (1142.2)	1963.9 (1051.5)	1753.6 (1218.7)	2024.4 (1623.5)
Presence of Children	0.306 (0.461)	0.554 (0.497)	0.332 (0.471)	0.303 (0.460)	0.328 (0.470)	0.540 (0.498)
<i>N</i>	2632	14135	2545	2656	2891	16088

Notes: Standard deviations are in parentheses.

TABLE A4. DESCRIPTIVE STATISTICS: SOEP (1995-2012)

	Husband working:			Wife working:		
	More than wife	As much as wife	Less than wife	More than husband	As much as husband	Less than husband
Life satisfaction	7.190 (1.527)	7.192 (1.527)	7.114 (1.559)	7.243 (1.511)	7.131 (1.606)	7.282 (1.544)
Respondent's working hours	42.42 (7.762)	47.00 (9.513)	36.67 (10.23)	42.40 (8.077)	44.80 (9.518)	27.28 (12.03)
Respondent's income	2741.5 (1622.0)	3489.9 (2477.0)	2534.6 (1530.8)	2288.6 (1350.6)	2521.9 (1885.6)	1509.0 (1147.2)
Share of respondent's income	0.545 (0.116)	0.696 (0.159)	0.498 (0.158)	0.456 (0.116)	0.512 (0.166)	0.306 (0.160)
Self-assessed health	2.421 (0.825)	2.445 (0.809)	2.449 (0.835)	2.418 (0.833)	2.469 (0.852)	2.432 (0.816)
Education	12.51 (2.782)	12.75 (2.794)	12.87 (2.774)	12.63 (2.703)	13.21 (2.805)	12.47 (2.546)
Age	44.07 (9.541)	44.27 (8.582)	43.47 (9.843)	41.85 (9.696)	41.73 (10.08)	42.27 (8.791)
Partner's working hours	42.42 (7.762)	27.11 (12.06)	45.16 (9.196)	42.40 (8.077)	35.76 (11.08)	47.03 (9.586)
Partner's income	2277.7 (1321.1)	1490.2 (1127.7)	2542.5 (1955.0)	2761.6 (1700.0)	2462.5 (1554.4)	3515.4 (2530.7)
Presence of Children	0.315 (0.465)	0.545 (0.498)	0.303 (0.460)	0.307 (0.461)	0.291 (0.454)	0.527 (0.499)
<i>N</i>	3247	31483	6263	3371	6728	32139

Notes: Standard deviations are in parentheses.

TABLE A5. FREQUENCY OF RESPONSES IN ATTITUDES TOWARDS EGALITARIANISM WITH THE HOUSEHOLD: BHPS (1997-2007)

	Agree on the following opinion:					
	(1) Family suffers if mother works full-time	(2) Woman and family happier if she works	(3) Husband and wife should both contribute	(4) Full-time job makes woman independent	(5) Husband should earn, wife stay at home	(6) Children need father as much as mother
<i>Percentages of response (Wives):</i>						
1 - Strongly Agree	4.21	1.68	12.86	7.17	1.30	30.76
2 - Agree	24.52	15.89	38.81	27.71	5.61	53.13
3 - Neither Agree, disagree	25.01	56.26	37.11	32.47	19.98	10.42
4 - Disagree	34.46	23.86	10.40	30.23	46.72	4.85
5 - Strongly Disagree	11.80	2.27	0.82	2.28	26.40	0.85
N	9942	9941	9340	9946	9945	9946
<i>Percentages of response (Husbands):</i>						
1 - Strongly Agree	4.03	1.34	11.44	4.88	1.57	33.36
2 - Agree	23.72	15.11	36.92	32.01	6.97	54.57
3 - Neither Agree, disagree	29.41	55.69	40.69	39.32	25.84	9.05
4 - Disagree	35.11	25.12	9.96	22.01	47.43	2.55
5 - Strongly Disagree	7.74	2.73	0.98	1.77	18.18	0.46
N	8644	8642	8642	8641	8648	8650
Mean of the total sample	3.202	3.115	2.508	2.894	3.816	1.880
SD of the total sample	1.047	0.739	0.863	0.935	0.891	0.779

TABLE A6. LIFE SATISFACTION AND RELATIVE WORKING HOURS AMONG COUPLES
(CONTROLS ONE BY ONE): ATUS (2012-2013)

	Without controls	With Job chars.	All controls
	(1)	(2)	(3)
Dependent variable: <i>life satisfaction</i>			
<i>Female</i>	0.093** (0.039)	0.088** (0.041)	0.076* (0.040)
<i>WorkMoreThanPartner</i>	-0.008 (0.036)	-0.005 (0.040)	-0.004 (0.039)
<i>WorkMoreThanPartner × Female</i>	-0.091 (0.064)	-0.103 (0.064)	-0.123** (0.062)
<i>EarnMoreThanPartner</i>	-0.016 (0.040)	-0.009 (0.045)	-0.012 (0.043)
<i>EarnMoreThanPartner × Female</i>	-0.033 (0.055)	-0.053 (0.056)	-0.020 (0.054)
<i>lnOwnworkinghours</i>		0.016 (0.038)	0.009 (0.038)
<i>N</i>	4197	4197	4197
<i>R</i> ²	0.004	0.015	0.110

Notes: *** significant at the 1% level, ** significant at the 5% level and * significant at the 10% level.
The data are from the ATUS, 2012-2013. All dependent variables are standardized to have a mean of 0 and a standard deviation of 1. Regressions are estimated using linear models. Additional controls include the log of respondent's working hours, the log of spouse's working hours, the log of respondent's earnings, the log of spouse's earnings, respondent's age, age-squared, self-assessed health, education dummies, occupation dummies, the number of children, state fixed effects, and year fixed effects. Robust standard errors are in parentheses.

TABLE A7. LIFE SATISFACTION AND RELATIVE WORKING HOURS AMONG COUPLES
(EQUIVALENT YEARS): ATUS, PSID, BHPS AND SOEP

	ATUS (2012-2013)	PSID (2015-2016)	BHPS (2007-2008)	SOEP (2010-2012)
	(1)	(2)	(3)	(4)
Dependent variable: <i>life satisfaction</i>				
<i>Female</i>	0.076* (0.040)	0.149*** (0.066)	0.080* (0.047)	0.125*** (0.023)
<i>WorkMoreThanPartner</i>	-0.004 (0.039)	0.093 (0.062)	0.085* (0.044)	-0.014 (0.022)
<i>WorkMoreThanPartner</i> × <i>Female</i>	-0.123** (0.062)	-0.180** (0.083)	-0.162*** (0.053)	-0.047 (0.030)
<i>EarnMoreThanPartner</i>	-0.012 (0.043)	0.061 (0.062)	-0.033 (0.038)	0.081*** (0.048)
<i>EarnMoreThanPartner</i> × <i>Female</i>	-0.020 (0.054)	-0.074 (0.081)	0.056 (0.047)	-0.123*** (0.030)
<i>lnOwnworkinghours</i>	0.009 (0.038)	0.062** (0.031)	-0.190*** (0.042)	-0.137*** (0.020)
<i>N</i>	4,197	3,802	6,716	19,845
<i>R</i> ²	0.110	0.124	0.045	0.221

Notes: *** significant at the 1% level, ** significant at the 5% level and * significant at the 10% level.

The data are from the ATUS 2012-2013; PSID 2015-2016; BHPS 2007-2008; SOEP 2010-2012. All dependent variables are standardized to have a mean of 0 and a standard deviation of 1. Regressions are estimated using linear models. Additional controls include the log of respondent's working hours, the log of spouse's working hours, the log of respondent's earnings, the log of spouse's earnings, respondent's age, age-squared, self-assessed health, education dummies, occupation dummies, the number of children, state/region fixed effects, and year fixed effects. Robust standard errors are in parentheses.

TABLE A8. RELATIVE WORKING HOURS AND AVERAGED GAPS IN HOURS WORKED BY HUSBAND'S AND WIFE'S OCCUPATION (FIRST STAGE REGRESSIONS): ATUS, PSID, BHPS, SOEP

	ATUS (2012-2013) (1)	PSID (2015-2016) (2)	BHPS (1996-2008) (3)	SOEP (1995-2012) (4)
Panel A: WorkingMoreThanPartner				
<i>AveragedGapinHoursWorked</i>	0.043*** (0.008)	0.011*** (0.001)	0.005*** (0.000)	0.015*** (0.000)
<i>AveragedGapinHoursWorked</i> × Female	-0.048** (0.013)	0.003*** (0.001)	0.001*** (0.000)	-0.004*** (0.000)
Panel B: WorkingMoreThanPartner × Female				
<i>AveragedGapinHoursWorked</i>	-0.021*** (0.005)	-0.006*** (0.002)	-0.008*** (0.001)	0.000 (0.001)
<i>AveragedGapinHoursWorked</i> × Female	0.074*** (0.008)	0.016*** (0.001)	0.011*** (0.000)	0.009*** (0.000)
<i>N</i>	4,197	3,802	40,947	83,231
Cragg-Donald Wald F-Statistic	5.374	273.661	423.948	1562.10

Notes: *** significant at the 1% level, ** significant at the 5% level and * significant at the 10% level. The data are from the ATUS 2012-2013; PSID 2015-2016; BHPS 1996-2008; SOEP 1995-2012. All dependent variables are standardized to have a mean of 0 and a standard deviation of 1. Regressions are estimated using linear models. Additional controls include respondent's sex, the log of respondent's working hours, the log of spouse's working hours, the log of respondent's earnings, the log of spouse's earnings, a dummy whether the respondent is earning more than the spouse, an interaction term between earning more than the spouse and being female, respondent's age, age-squared, self-assessed health, education dummies, occupation dummies, the number of children, state/region fixed effects, and year fixed effects. Robust standard errors are in parentheses.

TABLE A9. ACTIVITY PER DAY AND RELATIVE WORKING HOURS
AMONG COUPLES (OLS): ATUS (2012-2013)

Dependent variables:	<i>Household tasks</i>	<i>Leisure</i>	<i>Personal care</i>
	(1)	(2)	(3)
<i>Female</i>	6.367*** (0.953)	-40.254*** (8.136)	34.369*** (5.844)
<i>WorkMoreThanPartner</i>	0.384 (0.944)	-17.976** (8.057)	-9.090 (5.787)
<i>WorkMoreThanPartner × Female</i>	-0.568 (1.497)	7.520 (12.781)	-8.637 (9.181)
<i>EarnMoreThanPartner</i>	-0.471 (1.046)	-9.252 (8.932)	6.619 (6.416)
<i>EarnMoreThanPartner × Female</i>	-0.834 (1.298)	4.049 (11.078)	-9.848 (7.958)
<i>lnOwnworkinghours</i>	-4.979*** (0.907)	-24.482*** (7.743)	-3.868 (5.562)
<i>N</i>	4197	4197	4197
<i>R</i> ²	0.154	0.156	0.147

Notes: *** significant at the 1% level, ** significant at the 5% level and * significant at the 10% level.

The data are from the ATUS, 2012-2013. Dependent variables are respondent's hours spent doing household tasks in an average day, having leisure and doing personal care. Regressions are estimated using linear models. Additional controls include the log of respondent's working hours, the log of spouse's working hours, the log of respondent's earnings, the log of spouse's earnings, respondent's age, age-squared, self-assessed health, education dummies, occupation dummies, the number of children, state fixed effects, and year fixed effects. Robust standard errors are in parentheses.

TABLE A10. LIFE SATISFACTION AND INTERACTION BETWEEN TIME USE AND RELATIVE WORKING HOURS AMONG COUPLES (OLS): ATUS (2012-2013)

Dependent variable:	<i>Life satisfaction</i>		
	(1)	(2)	(3)
<i>Female</i>	0.066 (0.050)	0.011 (0.464)	0.085* (0.049)
<i>WorkMoreThanPartner</i>	-0.025 (0.050)	-0.040 (0.054)	0.009 (0.059)
<i>WorkMoreThanPartner</i> × <i>Female</i>	0.000 (0.088)	-0.016 (0.093)	-0.022 (0.084)
<i>EarnMoreThanPartner</i>	-0.012 (0.043)	-0.012 (0.044)	-0.009 (0.043)
<i>EarnMoreThanPartner</i> × <i>Female</i>	-0.019 (0.054)	-0.020 (0.054)	-0.023 (0.054)
<i>HHtasks</i> × <i>Female</i>	0.000 (0.000)	0.000 (0.002)	
<i>WorkMoreThanPartner</i> × <i>Female</i> × <i>HHtasks</i>	-0.001* (0.000)	-0.001 (0.000)	
<i>lnOwnworkinghours</i>	0.009 (0.038)	0.084 (0.109)	0.014 (0.038)
<i>lnOwnworkinghours</i> × <i>Female</i> × <i>HHtasks</i>		-0.000 (0.000)	
<i>WorkMoreThanPartner</i> × <i>Female</i> × <i>RoutineTasks</i>			-0.001 (0.000)
<i>WorkMoreThanPartner</i> × <i>Female</i> × <i>RecreationTasks</i>			-0.000 (0.001)
<i>RoutineTasks</i> × <i>Female</i>			0.000 (0.000)
<i>RecreationTasks</i> × <i>Female</i>			-0.000 (0.000)
<i>WorkMoreThanPartner</i> × <i>Female</i> × <i>HHtasksbyPartner</i>			
<i>N</i>	4,197	4,197	4,197
<i>R</i> ²	0.111	0.112	0.114

Notes: *** significant at the 1% level, ** significant at the 5% level and * significant at the 10% level. The data are from the ATUS, 2012-2013. Dependent variables are the log of respondent's hours spent doing household tasks in an average day, having leisure and doing personal care. Regressions are estimated using linear models. Additional controls include the log of respondent's working hours, the log of spouse's working hours, the log of respondent's earnings, the log of spouse's earnings, respondent's age, age-squared, self-assessed health, education dummies, occupation dummies, the number of children, state fixed effects, and year fixed effects. Robust standard errors are in parentheses.

TABLE A11. SATISFACTION WITH HOUSE/PARTNER AND RELATIVE WORKING HOURS
AMONG COUPLES (OLS): BHPS, SOEP

	BHPS (1996-2008)		SOEP (1995-2012)	
	(2)	(3)	(4)	(5)
Dependent variables:	<i>Satisfaction with house</i>	<i>Satisfaction w. partner</i>	<i>Satisfaction w. dwelling</i>	<i>Satisfaction w. family</i>
<i>Female</i>	0.076*** (0.022)	-0.021** (0.009)	0.075*** (0.013)	-0.023 (0.018)
<i>WorkMoreThanPartner</i>	0.012 (0.020)	0.023*** (0.008)	0.011 (0.012)	-0.010 (0.017)
<i>WorkMoreThanPartner</i> × <i>Female</i>	-0.062** (0.024)	-0.019* (0.010)	-0.056*** (0.017)	-0.087*** (0.024)
<i>EarnMoreThanPartner</i>	-0.013 (0.018)	-0.010 (0.008)	0.024* (0.013)	-0.005 (0.019)
<i>EarnMoreThanPartner</i> × <i>Female</i>	-0.065*** (0.022)	-0.004 (0.009)	-0.087*** (0.017)	0.021 (0.024)
<i>lnOwnworkinghours</i>	-0.132*** (0.019)	-0.022*** (0.008)	-0.085*** (0.011)	-0.096*** (0.016)
<i>N</i>	40,899	40,854	83,065	36,005
<i>R</i> ²	0.045	0.021	0.068	0.076

Notes: *** significant at the 1% level, ** significant at the 5% level and * significant at the 10% level.

The data are from the PSID 2015-2016; BHPS 1996-2008; SOEP 1995-2012 All dependent variables are standardized to have a mean of 0 and a standard deviation of 1. Regressions are estimated using linear models. Additional controls include the log of respondent's working hours, the log of spouse's working hours, the log of respondent's earnings, the log of spouse's earnings, respondent's age, age-squared, self-assessed health, education dummies, occupation dummies, the number of children, state/region fixed effects, and year fixed effects. Robust standard errors are in parentheses.

TABLE A12. LIFE SATISFACTION AND RELATIVE WORKING HOURS AMONG COUPLES
BY AGE AND PARENTHOOD STATUS (OLS): ATUS, PSID, BHPS, SOEP

	ATUS (2012-2013)	PSID (2015-2016)	BHPS (1996-2008)	SOEP (1995-2012)
	(1)	(2)	(3)	(4)
Dependent variable: <i>life satisfaction</i>				
Panel A: Baseline results (OLS)				
<i>WorkingMoreThanPartner</i> × <i>Female</i>	-0.123** (0.062)	-0.180** (0.083)	-0.088*** (0.022)	-0.027* (0.015)
<i>N</i>	4,197	3,802	40,947	83,231
<i>R</i> ²	0.110	0.117	0.036	0.213
Panel B: Born after 1965				
<i>WorkingMoreThanPartner</i> × <i>Female</i>	-0.188** (0.075)	-0.251** (0.103)	-0.125*** (0.032)	-0.033 (0.024)
<i>N</i>	2,802	2,668	16,687	27,928
<i>R</i> ²	0.109	0.137	0.046	0.185
Panel C: With children				
<i>WorkingMoreThanPartner</i> × <i>Female</i>	-0.118 (0.076)	-0.239** (0.119)	-0.067* (0.037)	-0.081*** (0.026)
<i>N</i>	2,918	2,253	19,926	40,005
<i>R</i> ²	0.112	0.170	0.039	0.212

Notes: *** significant at the 1% level, ** significant at the 5% level and * significant at the 10% level.

The data are from the ATUS, 2012-2013; the PSID, 2015-2016; the BHPS 1996-2008 and SOEP 1995-2012. All dependent variables are the respondent's life satisfaction. Regressions are estimated using linear models. Additional controls include the respondent's sex, the log of respondent's working hours, the log of spouse's working hours, a dummy whether the respondent is working more than the spouse, the log of respondent's earnings, the log of spouse's earnings, a dummy whether the respondent is earning more than the spouse, an interaction term between earning more than spouse and being female, respondent's age, age-squared, self-assessed health, education dummies, occupation dummies, the number of children, state fixed effects, and year fixed effects. Robust standard errors are in parentheses.

TABLE A13. LIFE SATISFACTION AND RELATIVE WORKING HOURS AMONG COUPLES
BY AGE (OLS): ATUS, PSID, BHPS, SOEP

	ATUS (2012-2013)	PSID (2015-2016)	BHPS (1996-2008)	SOEP (1995-2012)
	(1)	(2)	(3)	(4)
Dependent variable: <i>life satisfaction</i>				
Panel A: Baseline results (OLS)				
<i>WorkingMoreThanPartner</i> × <i>Female</i>	-0.123** (0.062)	-0.180** (0.083)	-0.088*** (0.022)	-0.027* (0.015)
<i>N</i>	4,197	3,802	40,947	83,231
<i>R</i> ²	0.110	0.117	0.036	0.213
Panel B: Born after 1965				
<i>WorkingMoreThanPartner</i> × <i>Female</i>	-0.188** (0.075)	-0.251** (0.103)	-0.125*** (0.032)	-0.033 (0.024)
<i>N</i>	2,802	2,668	16,687	27,928
<i>R</i> ²	0.109	0.137	0.046	0.185
Panel C: Born after 1970				
<i>WorkingMoreThanPartner</i> × <i>Female</i>	-0.243*** (0.085)	-0.301*** (0.114)	-0.077* (0.041)	-0.096*** (0.032)
<i>N</i>	2,117	2,212	9,897	14,281
<i>R</i> ²	0.115	0.153	0.045	0.170

Notes: *** significant at the 1% level, ** significant at the 5% level and * significant at the 10% level.

The data are from the ATUS, 2012-2013; the PSID, 2015-2016; the BHPS 1996-2008 and SOEP 1995-2012. All dependent variables are the respondent's life satisfaction. Regressions are estimated using linear models. Additional controls include the respondent's sex, the log of respondent's working hours, the log of spouse's working hours, a dummy whether the respondent is working more than the spouse, the log of respondent's earnings, the log of spouse's earnings, a dummy whether the respondent is earning more than the spouse, an interaction term between earning more than spouse and being female, respondent's age, age-squared, self-assessed health, education dummies, occupation dummies, the number of children, state fixed effects, and year fixed effects. Robust standard errors are in parentheses.

TABLE A14. LABOUR FORCE PARTICIPATION, DURABILITY OF MARRIAGE AND
RELATIVE WORKING HOURS AMONG COUPLES (FE): PSID, BHPS, SOEP

	PSID (1968-2013)	BHPS (1996-2008)	SOEP (1995-2012)
	(1)	(2)	(3)
Panel A: Wife in labor force in t+1			
<i>WorkingMoreThanPartner</i>	-0.010*** (0.005)	-0.033*** (0.007)	-0.012* (0.007)
<i>N</i>	71,795	17,824	36,362
<i>R</i> ²	0.512	0.713	0.574
Panel B: Log of wife's working hours in t+1			
<i>WorkingMoreThanPartner</i>	-0.007 (0.007)	-0.015 (0.010)	-0.006 (0.006)
<i>N</i>	66,681	17,824	32,895
<i>R</i> ²	0.565	0.684	0.827
Panel C: Being divorced/separated in t+1			
<i>WorkingMoreThanPartner × Female</i>	0.003*** (0.000)	-0.000 (0.005)	0.006** (0.003)
<i>N</i>	143,316	35,973	71,493
<i>R</i> ²	0.630	0.380	0.805

Notes: *** significant at the 1% level, ** significant at the 5% level and * significant at the 10% level.

The data are from the PSID, 1968-2013; the BHPS 1996-2008 and the SOEP 1995-2012. Dependent variables are a dummy whether the wife is in labor force in t+1, the wife's log working hours, and a dummy whether respondent is divorced/separated in t+1. Regressions are estimated using linear models. Additional controls include the log of respondent's working hours, the log of spouse's working hours, a dummy whether respondent is working more than spouse, the log of respondent's earnings, the log of spouse's earnings, a dummy whether respondent is earning more than spouse, and an interaction between earning more and being female, respondent's age, age-squared, self-assessed health, education dummies, occupation dummies, the number of children, state/region fixed effects, and year fixed effects. Robust standard errors are in parentheses.

TABLE A15. LIFE SATISFACTION, GENDER IDEOLOGY AND RELATIVE WORKING HOURS AMONG COUPLES: BHPS 1997-2007

	Agree on the following opinion:					
	(1) Family suffers if mother works full-time	(2) Woman and family happier if she works	(3) Husband and wife should both contribute	(4) Full-time job makes woman independent	(5) Husband should earn, wife stay at home	(6) Children need father as much as mother
<i>Female</i>	0.184*** (0.036)	-0.013 (0.037)	-0.108*** (0.036)	-0.218*** (0.037)	0.088*** (0.030)	-0.129*** (0.036)
<i>WorkMoreThanPartner</i>	0.091*** (0.032)	-0.019 (0.033)	-0.132*** (0.032)	-0.143*** (0.034)	0.108*** (0.027)	-0.046 (0.033)
<i>WorkMoreThanPartner × Female</i>	-0.143*** (0.040)	0.066 (0.041)	0.203*** (0.040)	0.272*** (0.041)	-0.131*** (0.033)	0.027 (0.040)
<i>EarnMoreThanPartner</i>	0.198*** (0.030)	-0.091*** (0.030)	-0.066** (0.029)	-0.069** (0.031)	0.185*** (0.025)	0.005 (0.030)
<i>EarnMoreThanPartner × Female</i>	-0.461*** (0.037)	0.130*** (0.038)	0.179*** (0.037)	0.194*** (0.038)	-0.345*** (0.031)	-0.024 (0.037)
<i>InOwnworkinghours</i>	-0.280*** (0.031)	0.126*** (0.032)	0.394*** (0.031)	0.376*** (0.032)	-0.079*** (0.026)	-0.002 (0.031)
<i>N</i>	17505	17503	17505	17506	17512	17515
<i>R²</i>	0.080	0.017	0.059	0.057	0.103	0.025
Total implied effects:						
<i>Male working less hours</i>	--	--	--	--	--	--
<i>Male working more hours</i>	0.091*** (0.032)	-0.019 (0.033)	-0.132*** (0.032)	-0.143*** (0.034)	0.108*** (0.027)	-0.046 (0.033)
<i>Female working less hours</i>	0.184*** (0.036)	-0.013 (0.037)	-0.108*** (0.036)	-0.218*** (0.037)	0.088*** (0.030)	-0.129*** (0.036)
<i>Female working more hours</i>	0.131*** (0.040)	0.034 (0.041)	-0.037 (0.040)	-0.088** (0.041)	0.065** (0.033)	-0.147*** (0.040)
<i>Female working more – Female working less</i>	-0.052** (0.026)	0.047* (0.027)	0.070** (0.026)	0.129*** (0.027)	-0.022 (0.022)	-0.018 (0.026)

Notes: *** significant at the 1% level, ** significant at the 5% level and * significant at the 10% level.

The data are from the BHPS 1997-2007. All dependent variables are standardized with mean 0 and standard deviation 1. Regressions are estimated using linear models. Additional controls include the log of respondent's working hours, the log of spouse's working hours, the log of respondent's earnings, the log of spouse's earnings, respondent's age, age-squared, self-assessed health, education dummies, occupation dummies, the number of children, state fixed effects, and year fixed effects. Robust standard errors are in parentheses.