

Natalie Nitsche<sup>1</sup> and Daniela Grunow<sup>2</sup>

<sup>1</sup> Max-Planck Institute for Demographic Research; nitsche@demogr.mpg.de

<sup>2</sup> Goethe University, Social Sciences; grunow@soz.uni-frankfurt.de

## *Couples' Ideological Pairings and Housework Sharing*

### **ABSTRACT**

This paper examines the gendered division of housework among German couples, testing a novel intra-couple mechanism potentially driving it. We investigate whether relative resources have a differential impact on housework divisions contingent on partners' agreement on gender ideology, or their ideological pairings. We hypothesize that whether partners agree or disagree on gender ideology will shape work-family arrangements and negotiation processes over work-divisions. Using multi-level growth curve modeling and data from the German 'Pairfam' Panel, we indeed find a significant interaction between ideological pairings and relative income. However, increases in her income share are associated with decreases in her housework share only among dual egalitarian couples and conflicting couples with an egalitarian woman. No income effect is present among dual traditional couples or conflicting couples with a traditional woman. These findings suggest that bargaining and/or planned gender equal arrangements occur primarily when the female or both partners hold gender egalitarian ideologies.

### **INTRODUCTION & BACKGROUND**

Today, more women than ever are obtaining higher education and participating in paid employment, in the industrialized world and beyond (Domański and Przybysz 2007; Kollmeyer 2012). This development has been intertwined with changes in family life and changing gender roles in the private and public realm. Amongst other, men have been taking up a larger share of domestic work and childcare, while women have reduced their time spent on housework and increased their labor market hours (Bühlmann et al. 2009; Davis and Greenstein 2009, Bianchi et al. 2000 & 2012). Yet, gender symmetry in family work (or the labor market) has not been achieved; women, on average, still spend considerably more time with housework and childcare

than men. These trends have been observed in many advanced nations, even though there is considerable variation in gendered family and labor market behaviors across countries.

The question of why couples share breadwinning and domestic duties the way they do is central to a deeper understanding of gendered work-family life today, and why equal sharing has advanced far in some and been sluggish in other domains. Many studies have investigated which factors contribute to gendered work divisions--both on the couple level and on the social context level in which couples' lives are embedded (for an overview see Lachance-Grzela and Boucard 2010). In particular, previous research on the gendered division of house-, care- and labor market work has been concerned with identifying the effect of four somewhat different motivational forces on gendered behavior: 1) life course events such as the transition to parenthood, 2) partners' socio-economic resources such as their absolute and relative levels of schooling and income, 3) both partners' gender ideology, and 4) scripted behavior such as 'doing gender'.

So far, most quantitative studies have identified significant effects of the birth of a first child (Schober 2013, Dechant et al. 2014, Gjerdingen & Center, 2005; Katz-Wise, Priess, Hyde, 2010) and of his and/or her gender ideology on the distribution of domestic work (Evertsson 2014, Schober 2013), while the relationship between absolute and relative resources and the distribution of domestic work appears to be more ambiguous and context-dependent (Kühhirt 2012, Dechant et al. 2014, Gupta 2006). What is, however, still lacking in this debate is a deeper investigation, both theoretically and empirically, of the underlying mechanisms and interactions among the partners through which specifically gender ideology and relative resources are linked to the gendered divisions of house- and care, work. The investigation of possible mechanisms is, however, crucial, because gender ideology, and the distribution of domestic-, care-, and labor market roles in families are highly interdependent and hence endogenous processes.

Our study aims at contributing to closing this gap, by suggesting and testing one possible mechanism. We suggest that his and her gender ideology and how they combine (ideological pairings of the partners), in other words the couples' gender ideological set-up, serve as a filter through which bargaining processes over the division of domestic and care work are shaped. Specifically, we hypothesize that relative socio-economic resources may have a differential effect on possible bargaining outcomes over the distribution of work among couples, dependent on how much the partners' gender beliefs and ideology are in agreement with each other. We suggest that different work-family-division-planning and negotiation processes within the couples will occur, contingent upon both partners' ideologies, and whether they match or are in conflict with each other. For instance, couples with two gender traditional partners may be more inclined to arrange a traditional male breadwinner family set-up, while dual egalitarian couples might be more likely to share paid and unpaid work equally. The key argument we make is that such 'ideological pairings' will be important in understanding how the partners' resources, or changes therein, may be linked to or affect the couple's gendered work divisions. Increases in her work hours or earnings may lead to increases in his time spent with chores or care work, but perhaps only among couples with dual egalitarian gender ideology. Alternatively, bargaining over work-divisions may take place in particular or more pronouncedly among partners with conflicting gender ideology, for instance when she holds an egalitarian ideology while he does not. In other words, higher earnings or earning potential in form of education may be used as a bargaining chip among 'conflicting'-ideology couples but not in 'same'-ideology couples, or a lesser degree in the latter couples. Indeed, our previous research shows this is the case with regards to her earnings and the parents' sharing of child care (Nitsche and Grunow 2018). Increases in her earnings are associated with increases in his share of childcare, but whether at all

and by which magnitude is contingent upon the couples' ideological pairing. Largest increases were present among 'egalitarian island' couples, which are couples with two gender-egalitarian partners.

In the current paper, we examine whether the association between relative economic resources and parents' division of housework is mediated by the partners' ideological pairings, in other words whether they are a match or a mismatch in gender ideology. Using data from the Panel Analysis of Intimate Relationships and Family Dynamics (pairfam), a German panel launched in 2008 featuring yearly waves, and growth curve modeling (MLM approach), we test whether the ideological pairings of the partners play a role for whether and how their absolute and relative socio-economic resources predict division of housework-trajectories as the relationship progresses over time. The data are very well suited for studying our hypotheses. The pairfam follows a sample of relatively young couples (focal individuals born between 1971 and 1993) over time, with yearly surveys of both partners, and a rich array of repeated questions on the division of various domestic work domains (housework, repair work, finances and organization, shopping, and child care), relationship quality and conflict, gender ideology, as well as socio-economic resources.

## **DATA AND ANALYTICAL STRATEGY**

### ***Data***

The data for our study come from the Panel Analysis of Intimate Relationships and Family Dynamics (pairfam), a panel survey from Germany<sup>1</sup>. Yearly waves were collected since 2008/09,

---

<sup>1</sup> *This paper uses data from the German Family Panel pairfam, coordinated by Josef Brüderl, Karsten Hank, Johannes Huinink, Bernhard Nauck, Franz Neyer, and Sabine Walper. pairfam is funded as long-term project by the German Research Foundation (DFG).*

we use data release 9.1, including all currently available waves (until wave 2018). The pairfam has a three-cohort design, and includes focal individuals born in the years 1971-73, 1981-83, and 1991-93. In addition to focal individuals, partners and other family members were surveyed. However, the partner interviews were conducted independently and voluntarily and conducted via mail-only questionnaires. Roughly one third of partners were not contacted with a questionnaire, due to non-granting of permission by focal individuals. Overall, this yields a response rate of only about 50% of partners across waves<sup>2</sup>. Despite this rather low response rate of partners, the pairfam and the partner data offer many advantages. In addition to information on relationship-, education-, fertility-, and employment- careers, both partners and individuals were repeatedly surveyed on a large variety of relationship-related and attitudinal questions such as gender ideology, relationship satisfaction, the division of and conflict with housework etc. The pairfam is thus a uniquely rich data source with respect to information on partners, allowing for a deep analyses of intra-couple dynamics.

### *Analytic Sample*

We restrict the analyses to couples living with children, for reasons on comparability.

Traditionalization toward more gendered divisions occurs after the birth of the first child, and how pronounced this change is, or whether the couple makes the transition to parenthood in the first place, may again be contingent on their gender ideology. We try to avoid this source of endogeneity by the sample restriction to parents. Our final sample consists of 2087 heterosexual couples living with children, and 7143 couple year observations, for which interviews for the anchor and the partners are available.

---

<sup>2</sup> For a detailed report on response rates across waves please see:  
[http://www.pairfam.de/fileadmin/user\\_upload/redakteur/publis/Dokumentation/TechnicalPapers/TP01\\_Field-Report\\_pairfam5.0.pdf](http://www.pairfam.de/fileadmin/user_upload/redakteur/publis/Dokumentation/TechnicalPapers/TP01_Field-Report_pairfam5.0.pdf)

## *Measurements*

Our **dependent process** of interest, the division of housework, has been measured at each wave on a 5-answer-option scale. Answering choices express the self-assessed division of housework between the partners and are as follows: “I do all the housework”, “I do most of the housework, my partner does some”, “We share equally”, “My partners does most of the housework, I do some”, and “My partners does all the housework”. Focal individuals as well as partners were surveyed separately on the division of housework. Both partners tend to exaggerate their own contribution to the housework (Schulz and Grunow 2011) in surveys, leading to discrepancies in their accounts of how housework is divided. We use information on the division of housework provided by focal individuals only, while controlling for the sex of the focal partner. We opted for this strategy because we are primarily interested in the trajectories of the division of housework in couples over time, and assume that following one individual and their account only will yield a consistent estimate of the division among partners and changes therein over time. A small minority of focal individuals (under 5%) report that most of the housework is outsourced and done by someone else than the partners. We have excluded those couples from the analyses.

To measure **gender ideology**, we rely on two specific question. More question on gender ideology have been survey in pairfam, by the alpha indicates they cannot be summarized into an index, which is why we opt for the single item strategy, using the two best fitting items for our research question: “Men should engage in housework to the same degree as women” (housework ideology), and “Women should be more concerned about their family than about their career” (family-career ideology). Answer options ranged from (1) ‘completely disagree’ to (5) ‘completely agree’. Note that agreeing to the first item implies gender egalitarian ideology while agreeing to the second item implies support separate gender spheres. Because we coded

ideological pairings, the reversed meaning of the answer options does not matter in the presentations of our results.

Both partners answered the ideology questions, which were collected in waves 1,3,5,7 and 9. We created an indicator of whether partners disagreed on each question or not, defining disagreement as having a distance of at least 2 answer choices between the two partners (e.g. 1 and 4, or 2 and 5 in either direction). This strategy yields four categories. They indicate whether a couple 1) agrees and is gender egalitarian, 2) agrees and is gender traditional, 3) disagrees with her holding an egalitarian ideology and him holding a traditional ideology, and 4) disagrees with her holding a traditional and him holding a gender egalitarian ideology. For each couple, we use the first available observation measuring gender ideology, and have fixed the variable to that value. We could instead have conceptualized gender ideology as a time-varying covariate. However, in order to avoid a possible feed-back loop of the actual division of housework on the gender ideology question, we decided to fix this covariate at the first available point of measurement.

**Absolute and relative resources**, are, however, conceptualized as time-varying covariates, lagged by one wave (in order to predict the division of labor/changes therein in the next wave). Education is measured in 4 categories: low, medium, high, and currently enrolled in education. We choose to measure education in these four mutually exclusive categories as the sample is relatively young with a significant proportion being enrolled. We measure her and his education, and also include an indicator of whether she has more education than him. Income is measured as 1) his logged earnings, and 2) her contribution to the household income. This measurement is a categorical measure with four categories: she contributes 0-25%, 26-50%, 51-75%, and 75-100% to the household income. Non-employed women (or men) were coded as contributing 0%.

We **control** for the sex of the focal person, the partners' age difference in years, marital status, number of children present in the household, and the age of the youngest child.

## **ANALYTICAL STRATEGY**

We estimate random effects growth-curve models, using a multi-level approach, and will compare three different estimation strategies. First, we estimate standard random effects models, coefficients will represent both within and between couple variance. These results are shown below. In future versions of the paper we will, second, use the same models, predicting how between and within couple variance, i.e. deviations from the grand and couple level mean in absolute and relative income and education over time, predict changes in housework divisions, in interaction with the ideological pairings. This strategy is superior to simply using observed values, as we can decompose the variance into a between couple- and a within couple-effect. Third, we will use a fixed-effects equivalent estimation strategy (Mundlack 1978), estimating how changes in the variation of absolute and relative income around the couple-specific mean predict changes in housework divisions in interaction with the ideological pairings. The difference to estimation strategy 1) will be that we add the mean income, education, and interaction effect variables to the model, essentially purging out all couple-constant characteristics of the couple related to this specific variable or interaction. This way, unobserved heterogeneity producing correlation between the predictor of interest and the outcome variable should be purged out, similar to a couple-level fixed effects model. The ideological pairings are measured at the first couple observation and held constant at this value. We assume that changes in this variable over time are endogenous, in other words have been produced by adjusting

attitudes to the couples' lived work-divisions, which justified the time-constant modeling approach for the ideological pairings measurement.

On the first level, we model the time trend of the couples' trajectories of the division of housework over waves. Measurements of housework over waves are nested in couples. The second level then models the covariates on the couple level, including the ideology-income interactions.

## **RESULTS**

### *Sample Description*

Tables 1 and 2 show sample descriptives. Table 1 reflects that the majority of couples is married, female partners are on average 36 years old, and couples have just below two children on average. Half of women contribute at most a quarter to the household income, likely reflecting that this is a couple of young parents with many women being on leave or working in part-time. Only about 15% of women contribute more than 50% to the hh income.

Table 2 shows the distribution of couples across ideological pairings. The distributions of the two items differ, reflecting that most individuals have egalitarian attitudes toward housework sharing, but not on women's work-family roles. Thus, 75% of couples are dual-egalitarian couples on the housework ideology item (agree that partners should share housework equally), whereas only 23% of couples dually disagree with the statement that women should be more concerned about their family than about their career. Second largest category on the housework item are conflicting couples with a gender egalitarian woman and a 'traditional' man. On the family-career item, most couples actually fall in the category of being both moderate, meaning

they somewhat agree with the statement. This likely reflects the deep-rooted culture of the male breadwinner/female caregiver model in Germany.

### *Main Effects: Ideological Pairings & Income Share*

In the following, we describe the results from the regular multi-level random effects models. Results differentiating between within and between couple variance will be presented in the next version of the paper.

Figures 1a & 1b depict predicted housework sharing by ideological pairing, for both items, controlling for socio-economic resources and control variables. The scale ranges from 1 (he does all housework) to 5 (she does all housework). 3 means equal sharing. All types of couples share housework unequally, with her doing more than him. As expected, significant differences emerge by ideological pairing. Dual egalitarian couples have the most equal housework division, on both items. The other pairings don't significantly differ from each other on the family-career item. Conflicting couples with an egalitarian man have more equal sharing compared with moderate or traditional couples, suggesting that his egalitarian attitude may be decisive for more equal household divisions.

Figure 2 shows predicted housework sharing by her income proportion. The lower her income contribution to the household income is, the more housework she does. Differences between these four groups are very small though, and only the difference between women earning between 0-25% of the household income and women earning more than half of the household income are significant.

### *Interacting Ideological Pairings and Income Share*

Figures 3a and 3b depict predicted housework sharing by her income share quartiles and ideological pairings, interactively. Both models confirm that ideology/ideological pairings is a stronger predictor of housework sharing than is her income share, as variation by ideology within income share is larger than variation by income share within ideology. Moreover, the association between income share and housework sharing varies by ideological pairings, but most differences in income share on housework sharing within ideological pairing are insignificant, partly due to small cell sizes and large confidence intervals.

In figure 3a (housework ideology), her housework sharing becomes more equal with increases in her relative income among couples with two egalitarian partners, and conflicting ideology couples. Only the differences by income share among dual egalitarian couples are significant, though. There is no difference in her housework share contingent on her income share in dual moderate and dual traditional couples, although small groups sizes produce large confidence intervals.

Interactive results look similar for the second ideology item (career-family, figure 3b). Among dual egalitarian couples and conflicting couples with an egalitarian woman and a traditional man, the women earning more than 75% of the household income do significantly less housework compared with women earning less than half of the income. Small differences in housework sharing by her income share are present in the other groups as well, but remain insignificant. This means that although there seems to be an interactive effect between income quartile and ideological pairing, it is only significant among dual egalitarian couples, and for one item among conflicting couples with an egalitarian woman and a traditional man.

## **DISCUSSION AND CONCLUSION**

In this paper, we suggest that the association between relative (or absolute) socio-economic resources and gendered housework divisions in couples may be contingent not only on his or her gender ideology, but also on whether partners agree or are in conflict regarding their gender attitudes, i.e. their ideological pairings. Assuming that ideology is meaningful for behavior, such ideological pairings may shape work-family arrangements and negotiation processes over work-divisions. For instance, how and whether relative resources are used as ‘bargaining chips’ may be contingent on whether couples agree or disagree on gender egalitarian attitudes. Bargaining may occur primarily when she favors more egalitarian work-divisions than he does. Similarly, planned ‘fair’ or ‘equal’ divisions may primarily occur when both partners are in agreement with egalitarian gender ideology, whereas planned gendered divisions may be more often present in dual traditional couples.

We have used data from the German Panel Analysis of Intimate Relationships and Family Dynamics (pairfam) and multi-level growth curve models to test these hypotheses, restricting the analysis to couples living with children. We categorized couples into five ideological pairings (both egalitarian, both moderate, both traditional, conflicting egalitarian woman, conflicting traditional woman), using two different gender ideology items (housework sharing, women’s family-career roles) and interacted these pairings with a measure for relative income in predicting gendered housework divisions.

Two main findings come to the fore. First, both ideological pairings and relative income significantly predict housework sharing in a model with main effects only. Dual egalitarian couples have the most equal housework division, while other couples don’t differ much from each other. Increases in her relative income are associated with decreases in her housework, but

effect sizes are very small, and only significant between women contributing little and women contributing more than half of the household income.

Second, the interacted analyses reveal that her income share only consistently significantly associates with decreased in her housework contributions among dual egalitarian couples. For one item, conflicting couples with an egalitarian woman also associate higher female income share with lower female housework contributions. These findings suggest that couples with two egalitarian partners are different from the others. Whether they pursue more gender 'equal' planned work-family divisions or whether these couples react to changes in her or his income by changing housework divisions more flexibly than other, or whether women in such couples have stronger negotiation positions and can bargain for more equal housework divisions as their income rises we don't know. (These questions will partly be answered in the future version of the paper, which will differentiate within- from between-couple variance in the models.) Still, these first findings confirm that being in an 'egalitarian island couples', as we coined them in a previous study on childcare divisions featuring similar results (Nitsche and Grunow 2018), may be a prerequisite for more gender equal work-family arrangements in couples, in particular in a gender-conservative environment still featuring the male-breadwinner model institutionally such as Germany.

## LITERATURE

- Bianchi, S. M., Milkie, M. A., Sayer, L. C., & Robinson, J. P. (2000).** Is anyone doing the housework? Trends in the gender division of household labor. *Social Forces*, 79(1), 191-228.
- Bianchi, Sayer, L. C., S. M., Milkie, M. A., & Robinson, J. P. (2012).** Housework: Who did, does or will do it, and how much does it matter? *Social Forces*, 91(1), 55-63.
- Brüderl, Josef, Karsten Hank, Johannes Huinink, Bernhard Nauck, Franz J. Neyer, Sabine Walper, Philipp Alt, Petra Buhr, Laura Castiglioni, Christine Finn, Kristin Hajek, Michel Herzig, Bernadette Huyer-May, Rüdiger Lenke, Bettina Müller, Timo Peter, Veronika Salzburger, Claudia Schmiedeberg, Elisabeth Schubach, Philipp Schütze, Nina Schumann, Carolin Thönnissen, & Barbara Wilhelm. 2015.** The German Family Panel (pairfam). GESIS Data Archive, Cologne. ZA5678 Data file Version 6.0.0, doi:10.4232/pairfam.5678.6.0.0
- Bühlmann, F., Elcheroth, G., & Tettamanti, M. (2009).** The division of labour among European couples: The effects of life course and welfare policy on value–practice configurations. *European sociological review*, jcp004.
- Davis, S. N., & Greenstein, T. N. (2009).** Gender ideology: Components, predictors, and consequences. *Annual Review of Sociology*, 35, 87-105.
- Dechant, A., Rost, H., & Schulz, F. (2014).** Die Veränderung der Hausarbeitsteilung in Paarbeziehungen. Ein Überblick über die Längsschnittforschung und neue empirische Befunde auf Basis der pairfam-Daten. *Zeitschrift für Familienforschung-Journal of Family Research*, 26(2).
- Domański, H., & Przybysz, D. (2007).** Educational Homogamy in 22 European Countries. *European Societies*, 9(4), 495-526. doi: 10.1080/14616690701314119
- Evertsson, M. (2014).** Gender ideology and the sharing of housework and child care in Sweden. *Journal of Family Issues*, 35(7), 927-949.
- Gjerdingen, D. K., & Center, B. A. (2005).** First-time parents' postpartum changes in employment, childcare, and housework responsibilities. *Social Science Research*, 34(1), 103-116.
- Gupta, S. (2006).** Her money, her time: Women's earnings and their housework hours. *Social Science Research*, 35(4), 975-999.
- Katz-Wise, S. L., Priess, H. A., & Hyde, J. S. (2010).** Gender-role attitudes and behavior across the transition to parenthood. *Developmental psychology*, 46(1), 18.
- Lachance-Grzela, M., & Bouchard, G. (2010).** Why do women do the lion's share of housework? A decade of research. *Sex roles*, 63(11-12), 767-780.
- Mundlak, Y. (1978).** On the pooling of time series and cross section data. *Econometrica: journal of the Econometric Society*, 69-85.

- Kollmeyer, C.** (2012). Family structure, female employment, and national income inequality: A cross-national study of 16 Western countries. *European sociological review*, jcs060.
- Kühhirt, M.** (2012). Childbirth and the long-term division of labour within couples: how do substitution, bargaining power, and norms affect parents' time allocation in West Germany? *European Sociological Review*, 28(5), 565–582. doi:10.1093/esr/jcr026.
- Schober, P. S.** (2013). The parenthood effect on gender inequality: Explaining the change in paid and domestic work when British couples become parents. *European Sociological Review*, 29(1), 74-85.
- Schulz, F., & Grunow, D.** (2011). Comparing diary and survey estimates on time use. *European Sociological Review* 28:622-632.

## TABLES AND FIGURES

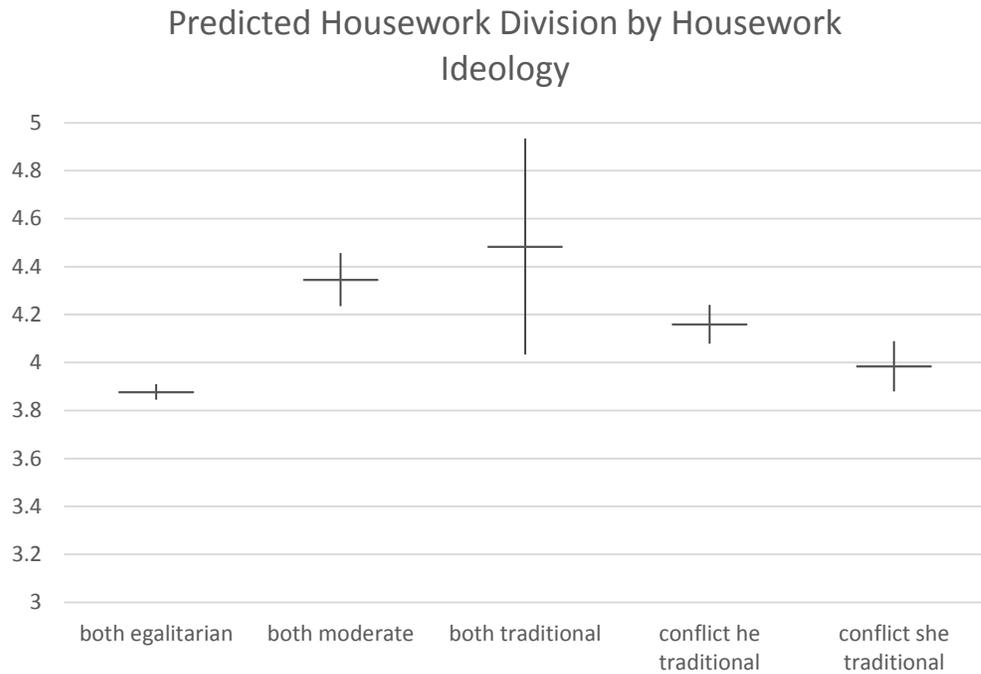
**Table 1: Sample Descriptives**

<b>PROPORTIONS</b>	<b>N</b>	<b>%</b>
Income Share		
0-25%	3,607	50.98
26-50%	2,360	33.36
51-75%	692	9.78
76-100%	416	5.88
Married		
	6,206	87.72
Cohabiting		
	869	12.28
Cohort 1991-93		
	49	0.69
Cohort 1981-83		
	2,353	33.26
Cohort 1971-73		
	4,673	66.05
<b>MEANS</b>	<b>AVERAGE</b>	
Her age	36.2	
Number kids	1.8	
Total	7,075	100

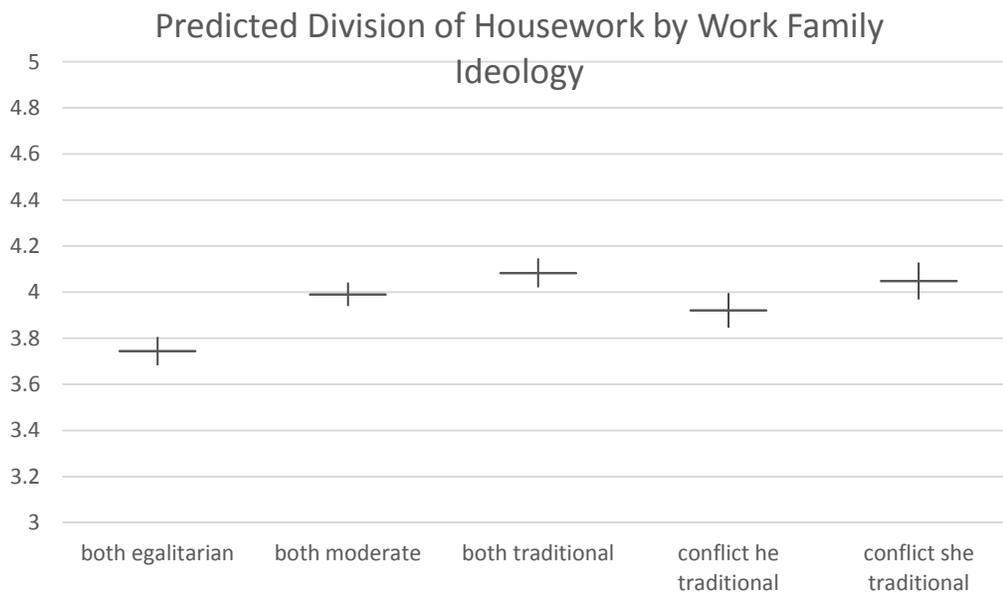
**Table 2: Distribution of Ideological Pairings**

<b>Ideological Pairing</b>	<b>Housework</b>		<b>Family-Career</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
both egalitarian	5,272	74.91	1,655	23.39
both moderate	445	6.32	2,207	31.19
both traditional	26	0.37	1,379	19.49
conflict he traditional	812	11.54	1,001	14.15
conflict she traditional	483	6.86	833	11.77
total	7,038	100	7,075	100

**Figure 1a: Main Effects Ideological Pairings (Housework Ideology)**

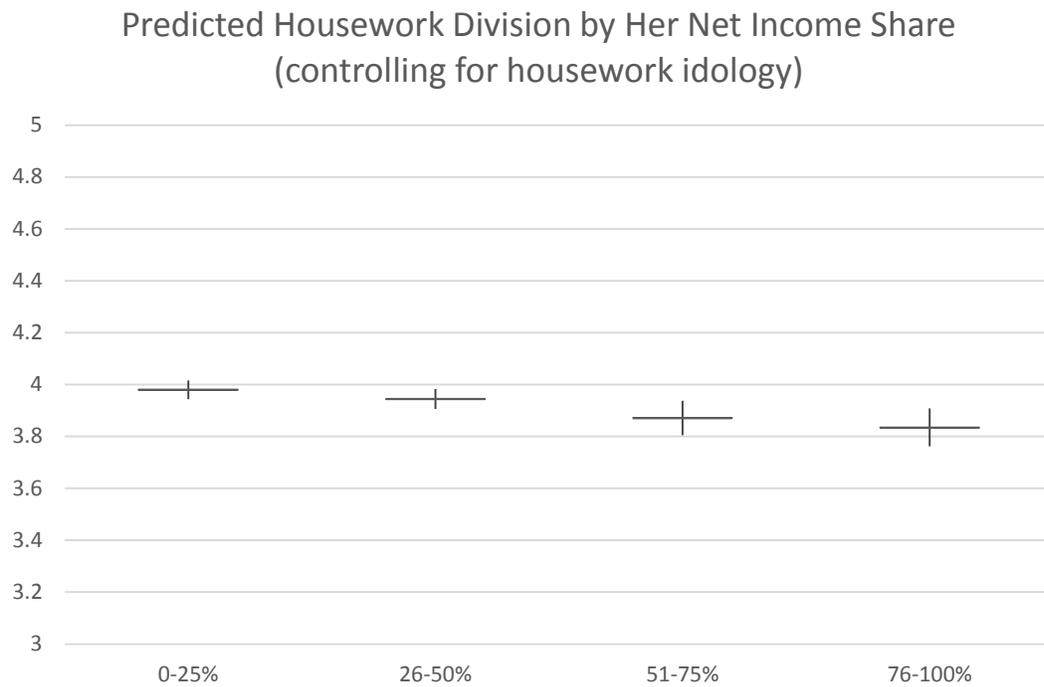


**Figure 1b: Main Effects Ideological Pairings (Family-Career Ideology)**



Models controls for sex of main respondent, East Germany, marital status, number of children, age of youngest child, her age, her and his education, income

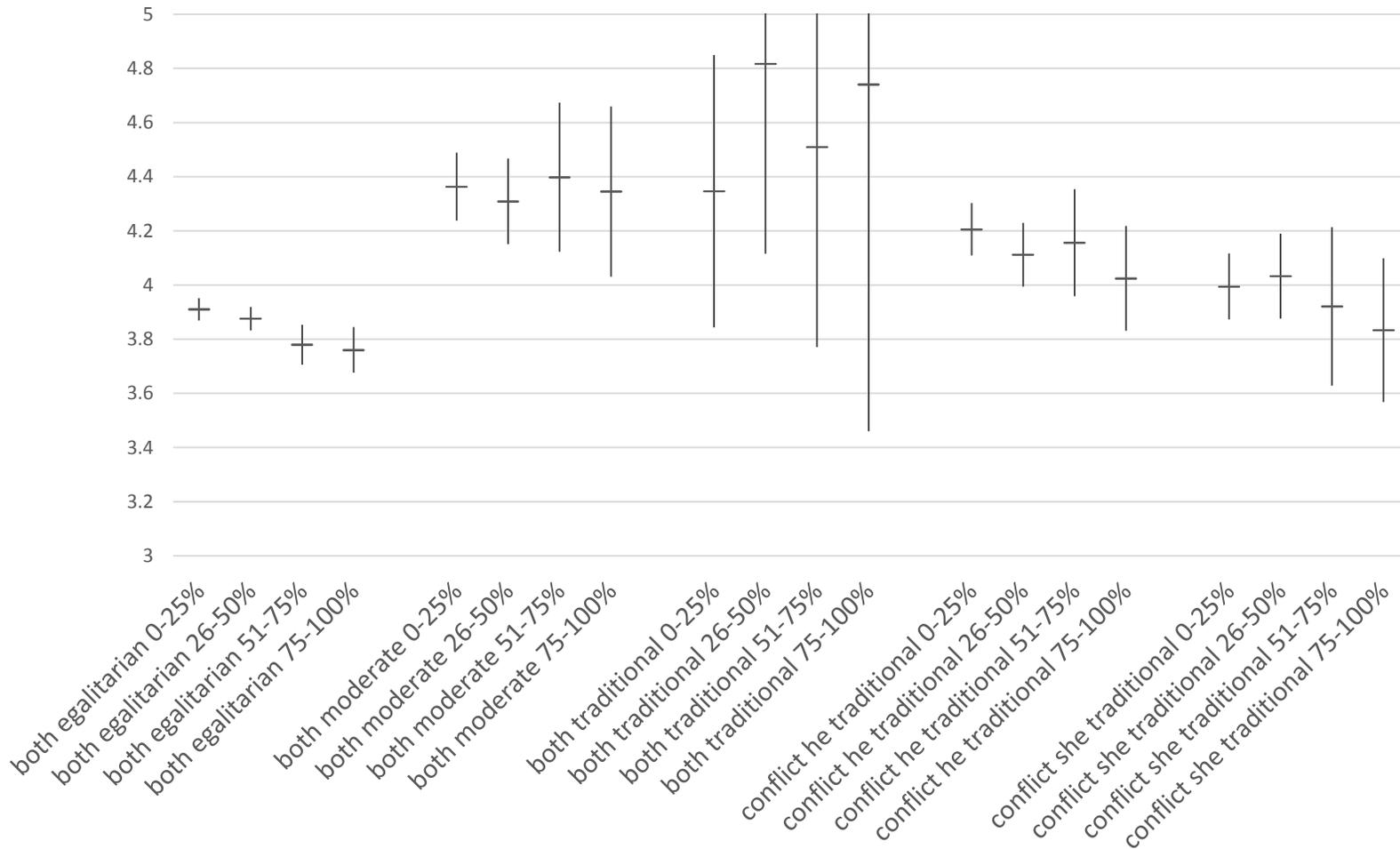
**Figure 2: Main Effects Income Share**



Model controls for sex of main respondent, East Germany, marital status, number of children, age of youngest child, her age, her and his education, gender ideology

Note: Predicted housework division nearly identical when controlling for the other gender ideology item

**Figure 3a: Predicted Division of Housework by Ideological Pairing-Income Ratio Interactions: Housework Ideology**



**Figure 3b: Predicted Division of Housework by Ideological Pairing-Income Ratio Interactions: Family-Career Ideology**

