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Are Children Barriers to the Gender Revolution? International Comparisons

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Abstract: 199 words: *Children seem to present a barrier to the gender revolution in that parents are more likely to divide paid and domestic work along traditional gender lines than childless couples are. However, the extent to which this is so varies between countries and over time. We used data on 35 countries from the 2012 International Social Survey Programme to identify the contexts in which parents and non-parents differ the most in their division of labour. In Central/South America, Eastern Europe, Southern Europe, Asia, and South Africa, labour sharing configurations did not vary as much with the presence of children as in Australia, Western Europe, North America, and Northern Europe. Our multilevel models helped explain this pattern by showing that children seem to present a greater barrier to the gender revolution in richer and, surprisingly, more gender equal countries. However, the relationship between children and couples' division of labour can be thought of as curvilinear, first increasing as societies progress, but then weakening if societies respond with policies that promote men's involvement at home. In particular, having a portion of parental leave reserved for fathers reduces the extent to which children are associated with a retreat from modern labour sharing configurations.*

Key words: male role, female role, labour force, housework, child care, family policy, gender revolution

1 Introduction

The massive gender revolution that is evident to varying degrees throughout the world appears to have two phases: During the first half, women join men in contributing labour in the public sphere by participating in market work; during the second half, men join women in contributing labour in the private sphere by participating in child care and housework (Goldscheider et al. 2015). Participating fully in both halves of the gender revolution presents a greater challenge to couples when they have children, given the time demands of caring for children and the strength of traditional parenting norms. However, the degree to which children strengthen a gender traditional division of paid and domestic work varies both across countries (Anxo et al. 2011, Craig and Mullan 2011; Neilson and Stanfors 2014) and over time (Craig et al. 2010; Neilson and Stanfors 2013, 2014; Kitterød and Rønsen 2014). The cultural, political, and economic context can influence the economic and subjective benefits of adopting the "male breadwinner/ female caregiver" family model (Hook 2006; Treas and Lui 2013). Thus, the presence of children in the household and their effect on women's participation in the labour force (first half of gender revolution) and on male involvement in the domestic sphere (second half of the revolution) may be moderated by the greater social context.

The broader literature on couples' division of labour has identified gender inequality, socioeconomic development, and work and family policies as important contextual variables (Fuwa 2004; Geist 2005; Campaña et al. 2015). Our question of whether children are barriers to the gender revolution stems from recognizing that these macro-level variables may condition the labour sharing of parents and childless couples differently. For instance, while an egalitarian division of housework is more common in advanced economies than in poorer countries, children may present a greater barrier to egalitarian labour sharing in wealthy countries because

parents make heavy investments in child quality. The growing body of literature on variation in the effect of parenthood on couples' division of labour across countries and over time focuses mostly on the contextual effects of work and family policies (Craig et al. 2010; Anxo et al. 2011; Kitterød and Rønsen 2014; Neilson and Stanfors 2014). We explicitly modeled gender inequality and socioeconomic development simultaneously with family policies.

Further, research to date on the extent to which parenthood exerts a traditionalizing influence on how couples divide labour has focused mostly on Northern Europe (Denmark, Finland, Norway, Sweden) with a handful of other countries represented (Australia, Canada, France, Germany, Italy, and the United States). We broadened the scope of this inquiry beyond Western societies using data from 35 countries from the 2012 International Social Survey Programme (ISSP). These data allowed us to describe how strongly the presence of children is associated with couples' division of labour across world regions—Northern, Eastern, Western, and Southern Europe, North America, Australia, Asia, Central/South America, and South Africa. We expected children to have a smaller effect on couples' division of labour in 1) countries with greater public sphere gender equality, 2) lower income countries, and 3) countries with supportive family policies. What we found suggests much greater complexity.

2 Background

The presence of children increases the expenses and domestic workload of the household, which affects how couples organize their time relative to paid and domestic labour. Children typically have a differential impact on men and women, who feel different pressures to provide and care, respectively (e.g., Anxo et al. 2011). As a result, parents tend to conform to more traditional gender roles than couples without children (Craig 2006; Fox 2009; Schober 2013; Cosp and Román 2014). Even when women have more education or greater earning power than their

partners, they continue to play a leading role in domestic life (Evertsson & Nermo, 2004; Killewald & Goug, 2010; Bittmann, 2015). Despite these generalizations, we expect the degree to which children are barriers to the gender revolution to be moderated by the gender equality context, the level of socioeconomic development, and family policies.

2.1 Gender Equality Context

Increasing men's involvement in work within the household—the second half of the gender revolution—often challenges prevailing notions of "men's work" and "women's work" (Kan et al. 2011; Blair-Loy et al. 2015). Cultural scripts for how gender is "done" tend to persist, even into the second generation after women enter the paid labour force in large numbers, and the prevalence of traditional gender norms limits the development of egalitarian divisions of labour (Kunovich & Kunovic, 2008; Davis & Greenstein, 2009; Lachance-Gzrela & Bouchard, 2010; Aassve et al., 2014).

The gender-based gaps in access to resources and opportunities in most countries mirror the way women and men confront social life in the public and private spheres. For instance, research on preferences in the United States has shown that both men and women would favor more egalitarian labour sharing arrangements if they were less constrained by workplace norms and policies (Pedulla & Thébaud, 2015). Countries with greater public sphere gender equality—i.e., increased legal equality and women's increased participation in government, the marketplace, and educational institutions—tend to favor the development of more egalitarian arrangements within families across both paid and domestic work (Fuwa, 2004, Knudsen & Wærness, 2008, Campaña et al., 2015). Importantly, all of these studies linking public sphere gender equality and couples' division of labour do not test whether public sphere gender equality conditions the traditionalizing effect associated with children. That is, they do not test whether

children matter less for couples' division of labour in more gender equal countries.

2.2 Socioeconomic development

National income per capita can be expected to condition the effect of children on couples' division of labour because it reflects different dimensions of socioeconomic development: employment, fertility rates, and standards of education and parenting. In lower income countries where informal sector jobs are more common and relatives (usually grandmothers) are often available, children may not limit many women's paid work as much as in higher income countries (Schkolnik 2004; Heisig 2011; Craig and Baxter 2016). While these strategies of work/time organization would promote the first half of the gender revolution by helping women to participate in the market, they also might retard the second half, because men are less necessary to fill the void created by women's economic activities.

Fertility expectations are also linked to national income levels. Where fewer women remain childless (and where more women have multiple children), childless couples may divide labour in ways that reflect their expectations to accommodate children into their household routines to a greater extent than where societal fertility levels are lower (Sullivan et al. 2014). In societies where childbearing is normatively expected, couples with and without children could thus have more similar gender roles. Hence, children might present a greater barrier to the gender revolution in higher income countries than in lower income countries.

2.3 Family Policies

Institutional frameworks and policies designed to reconcile work and family influence couples' domestic organization (Fuwa & Cohen, 2007;Neilson & Stanfors, 2014; Kleider, 2015). Many such labour and social policies have strengthened women's bargaining power (especially for female labour force participation) (Hakim 2006; Budig et al. 2012; Boeckman et al. 2015). For

example, countries that provide subsidized universal daycare or preschool reduce the opportunity costs to having both partners in the paid labour force, so couples are freer to negotiate the division of labour as they wish (Geist 2005; Korpi et al. 2013; Blofield & Martínez F. 2014). Also, research to date indicates that public support for families seems to contribute to equality, particularly parental leave policies focused on fathers (Sullivan et al., 2009; Kosadam & Finseraas, 2011; Bünning & Pollmann-Schult, 2016; Romero-Balsas, 2015). Nonetheless, many policies, such as very long maternal leaves or the provision of extensive opportunities for mothers to undertake part-time work, tend to give couples a greater incentive to divide their paid and domestic labour traditionally rather equally (Hennig, et al., 2012; Epstein et al. 2014; Munsch 2016).

Institutional change has the potential to alter cultural scripts or expectations regarding appropriate gender roles and responsibilities. For instance, proposals to reduce the fathers' quota in Norway met with opposition from labour groups—including firefighters—that argued that the fathers' quota was a right that should not be taken away: Proposed changes to the legislation have been withdrawn (Lappegård 2017). Nonetheless, the effect of policy on norms regarding gender roles is neither automatic nor instantaneous. Cultural stigmas associated with the flexibility of work practices (such as parental leave) restrict men's interweaving of domestic and family life (Coltrane et al. 2013; Rudman and Mescher 2013; Vandello et al. 2013). There is, nevertheless, ample reason to expect that children have less influence on couples' division of labour in societies with strong state supports for families (Anxo et al. 2011; Neilson and Stanfors 2013; Kaufman et al. 2016).

Our data allow us to provide a geographic perspective on how children affect both halves of the gender revolution in which all regions of the world are at least minimally represented. We

are able to analyse simultaneously how public sphere gender equality, socioeconomic development, and family policies condition the relationship between children and couples' division of labour.

3 Data, Measures, and Methods

3.1 Data

The International Social Survey Programme (ISSP) has conducted annual, comparable, nationally representative surveys in a wide variety of countries since 1984. It is well known for developing questions that are meaningful in all of the countries, and for its care in translating survey items (Harkness and Schoua-Glusberg 1998). We used data from the 2012 survey on "Family and Changing Gender Roles." The ISSP fielded the survey in 41 countries, of which we used 35, shown by region in Figure 1. The six countries excluded due to data limitations are marked by parentheses and the particular limitations are identified in footnotes.

Figure 1 about here

There were 29,524 respondents living in coresidential unions (both married and cohabiting) in the countries with requisite data. We limited our analytic sample to the 18,663 couples in which the respondent was aged 18-55 to minimize the effects of selection into retirement on our analysis of the division of labour.[1] In order to restrict the sample to couples that had a choice over how to divide labour, we dropped couples where at least one partner was permanently sick or disabled (484), unemployed but seeking work (2,176), or in compulsory service (38).

[1] Ideally, we would have imposed this age restriction on both partners in the couple, but the respondent's partner's age was not available in Austria, Bulgaria, Hungary, the Philippines, Russia, or South Africa.

Respondents who were temporarily not working because of parental leave were asked to provide information about their normal work situation.

We dropped the 2,471 respondents who did not give numeric responses for work hours (including non-response as well as answers like "varies" and "don't know.") We also dropped the three that did not report their gender.[2] This left 13,491 respondents across the 35 countries, with a range from 170 observations in Canada to 717 in France.

3.2 Measures

3.2.1 Dependent variable

To measure how couples divided paid and domestic work, we used the number of hours per week the survey respondent reported spending 1) doing paid work, 2) caring for other household members, and 3) doing household work. Respondents also reported the number of hours their partner spent in the same domains. We added care hours to housework hours to obtain domestic work hours (top-coded at 60 per week, as was paid work). We considered a couple's division of domestic or paid work to be equal if there was a difference of less than seven hours per week (less than one hour per day) between his contribution and hers.

We then constructed a four-category variable for couples' division of paid and domestic work (adapted from Moen 2003). In the first two categories, couples divided labour along traditional gender lines: she did more domestic work and he did more paid work. We called the couples "traditional" if she did not participate in paid labor at all, and "neo-traditional" if she did, but her paid work hours were at least seven per week fewer than his. The third category, which

[2] The respondent's gender is known, but the respondent's partner's gender is not known. Our assumption here that all partners are opposite-sex partners might lead to a slight underestimation of the extent to which division of labor falls along gendered lines.

we labeled "her second shift" (Hochschild with Machung 1989), was comprised of couples where both partners contributed similar paid hours, but she put in at least seven more hours of domestic work per week than he did. The first half of the gender revolution was apparent among couples in the "her second shift" category, but the second half of the gender revolution was not as women still carried a heavier domestic burden. The final category was comprised of couples in which the second half of the gender revolution was apparent: his contribution to domestic work equaled or exceeded hers. Although over 70 percent of the couples in this fourth category practiced an egalitarian division of labour in both spheres, we labeled this category "modern" rather than "egalitarian" because it also included couples who divided paid and domestic work unequally, but not along traditional gender lines. The distribution of these categories by region and by country is given in Table 1.

Table 1 about here

3.2.2 Individual-level independent variables

Our independent variables included respondent's age, education and gender, and our key independent variable was whether there was a child in the household (the number of children and their ages are considered in sensitivity analyses, section 5.1).[3] We grouped age into categories: 18-29 (reference category)[4], 30-44, and 45-55. The ISSP standardizes completed categories of education across countries, and we used these categories as a continuous variable. The average

[3] The relationship of the children in the household to the respondent is not known, meaning the sample includes not just biological parents but an unknown number of other families, e.g., step-parents and grandparents whose grandchildren live with them. We use the term "parents" for the sake of brevity to describe all those with a residential partner who also live with children.

[4] Less than 10 percent of the reference category was aged less than 22 years.

education level was postsecondary or higher in North America, Australia, and all regions of Europe, but somewhat less than postsecondary in Asia, Central/South America and South Africa (Table 1). We included a control for respondent's gender to capture differences in how men and women perceive and report work hours (see also section 5.1).

3.2.3 Contextual independent variables

We measured the context of gender equality using the World Economic Forum's Global Gender Gap Index (GGG) (Hausmann et al. 2014). The GGG measures how much of men's relative advantage has been closed in 1) health, 2) education, 3) economy, and 4) politics, and hence focuses totally on the public sphere of the gender revolution. We measured socioeconomic development using per capita gross national income (GNI) in 2012 (World Bank 2017). We employed two family policy variables: the number of weeks of paid parental leave,[5] and whether there is a "fathers' quota", i.e., a portion of paid parental leave is reserved for fathers (Addati, Cassirer, and Gilchrist 2014). The correlations among these contextual variables were acceptable, with the greatest between per capita GNI and the GGG (0.59). Although having a fathers' quota was more common in higher income countries, the GNI range was wide in both countries that provided one ($13,947 to $99,636) and countries did not ($1,485 to $83,295). (See section 5.2 for sensitivity analyses using alternative measures for each of the contextual variables.)

Table 2 about here

3.3 Methods

[5] When calculating weeks of paid parental leave, we discounted the number of weeks allowed by the proportion of salary provided during leave. For countries with flat rate benefits, we further discounted by the percentage of the average wage represented by the flat rate.

3.3.1 Individual-level regressions, separately by world region

Given the relatively small number of cases per country, we used regions rather than individual countries to provide a descriptive picture of variation in how children seem to impact couples' division of labour.[6] First, we used logistic regression models employing the individual-level controls listed above to predict the proportion of couples with and without children with a modern division of domestic work in each region. Next, we used multinomial logistic regression models predicting our four categories of work-family sharing (traditional, neotraditional, her second shift, and modern (reference)) to describe regional variation in the labour sharing arrangements that are more prevalent among couples with children. Because our data are cross-sectional, all we can conclude is whether the presence of children is associated with a less modern division of labour and greater prevalence of the other arrangements. Nevertheless, we uncovered sizable regional differences in how much the distribution across categories is associated with whether there are children in the household.

3.3.2 Multilevel regressions

We pooled data from all regions for our multilevel models. We first simply added dummy variables for world region and cross-level interaction terms between this set of dummies and whether the couple had a child in the household to the individual-level controls. The interaction terms identify where the effects associated with children were statistically distinct from Central/South America (the region with the smallest differences in labour sharing between childless couples and those with children).

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[6] Although this description is valuable overall, we note that the Asian region is particularly heterogeneous (Japan, South Korea, India, the Philippines, and Israel).

We then added the country-level contextual variables—GGG, GNI, paid weeks of parental leave and whether there was a father's quota—again including cross-level interactions with whether the couple had a child in the household. The coefficients on the contextual variables indicate the links between national context and the division of labour for all couples. Because we sought to determine which aspects of context explain the regional variation in how much the presence of children matters for the gendered division of labour, our key independent variables were the cross-level interaction terms between the contextual variables and whether there was a child in the household. As with the individual-level analyses, we estimated the effects of the contextual variables on the prevalence of modern labour sharing arrangements before identifying which other labour sharing configurations were prevalent among couples with children.

4 Results

4.1 Regional Patterns: Descriptive

The share of couples reporting a modern work-family configuration, most of whom share approximately equally both time in the public and private spheres, is relatively low in seven of our nine regions, with most below a third. They range from 27.1 percent in Eastern Europe to 38.5 percent in Western Europe (see Fig. 2a, which is arranged from low to high percentage modern). Only two regions display levels of close to half: North America (47.8%) and Northern Europe (55.6%). Of course, these comparisons do not control for individual-level factors likely to affect having a modern work-family configuration, most particularly the presence of children. The next section takes this further step.

Figure 2a about here

4.2 Regional Patterns in Labour Sharing Differences Associated with Children

As described in section 3.3.1, we used individual-level logistic regression models to predict the shares of couples with and without children practicing a modern division of labour in each region.[7] These predictions, displayed in figure 2b, show that the proportion of couples in which the man does an at least equal share of domestic work is lower in every region of the world if there is a child in the household. The difference is statistically significant everywhere (Appendix Table A), but the magnitude of the difference between childless couples and couples with children varies considerably across regions. The difference is relatively small in Eastern and Southern Europe, Asia, Central/South America, and South Africa. In these regions a modern division of labour is 8-15 percentage points lower among couples with children than those without, while it is 21-31 percentage points lower in Australia, Western Europe, North America, and Northern Europe.

Figure 2b about here

This pattern emerges not, however, because these latter regions exhibit traditional gender patterns, as we showed was not the case in Figure 2a. Their greater gender equality turns out to be disproportionately among childless couples, whose predicted odds of choosing a modern division of labour approach 60 percent in Northern America and exceed 70 percent in Northern Europe. Even with children, these countries show a higher proportion with modern configurations; it is just that their proportions having a modern division of paid and domestic

[7] The effects of the control variables are generally similar across regions and consistent with prior research (Appendix Table A): age has a negative effect on the odds of a modern work-family configuration; education has a positive effect; and women are less likely to report this configuration. The largest differences among regions, generally, are in the effects of children in the household.

work do not exceed those of the less gender equal regions as much when children are present than when they are not. Overall, there is much less variation between regions in the labour sharing arrangements among couples with children (the black bars in Figure 2b; 21-46 per cent modern) than among couples without children (the grey bars in Figure 2b; 37-74 per cent modern).

But which of the non-modern configurations is more common among couples with children? Do the five less egalitarian regions revert to the traditional configuration (women stay home)? Are the four more egalitarian regions likely to exhibit neo-traditional patterns (women work part time), or even her second shift (each works full time but women do more of the extra work likely resulting from the child)? We used predictions from multinomial regressions using the same variables as in Figure 2b, but expanded the set of outcomes to include these three configurations. We also standardized the size of the "retreat" from a modern division of labour to the average size for the whole sample, thus presenting the difference between childless couples and those with children in relative rather than absolute terms; this allows for direct comparison between regions of the likelihood that specific alternatives to a modern division of labour will be favoured (Figure 3).

Figure 3 about here

It becomes clear in Figure 3 that most of the same regions where children had small effects on the division of domestic work (Eastern Europe, Asia, Central/South America, and South Africa) are the ones where couples with children are particularly likely to choose a traditional division of labour. These regions, along with Southern Europe, also show less evidence of the second half of the gender revolution overall, in that their proportions of childless

couples practicing a "modern" division of labour are distinctly smaller (37-45%) than in the other regions (53-74%).

Southern Europe differs from the other four less egalitarian regions in that children seem to promote a neo-traditional rather than fully traditional division of labour. In Asia, neo-traditional arrangements are actually slightly less likely when couples have children. In Eastern Europe, women with children are less likely to carry a second shift (maintain equal paid work but do at least seven hours more domestic work).

Turning to the four more egalitarian regions, the most important contrast is in the "her second shift" category. Women are *more* likely to carry the second shift when children are present in North America and especially in Northern Europe, while in Western Europe children do not affect the likelihood of her second shift, and couples in Australia have a dramatically lower proportion of women with children carrying the second shift. Otherwise, the Australian pattern resembles that of the other three more egalitarian regions.

Another contrast among the four more egalitarian regions is that couples in North America seem to shift most toward traditional configurations when children are present, whereas in Australia, Western Europe, and Northern Europe, women with children are more likely to maintain some paid work (neo-traditional configurations are chosen). The factors producing the regional variations described in this section are unclear, and we turned to multilevel analysis to better understand how context shapes the patterns.

4.3 Multilevel Analysis

4.3.1 Modern division of labour versus all others

In our multilevel analysis, we pooled all the regions and employed the same individual-level controls as we did when predicting the labour sharing arrangements shown in Figures 2b and 3.

The first model in Table 3 adds dummy variables for region and interaction terms between region and whether there is a child in the household. Couples with children are 55 percent as likely to have a modern labour sharing arrangement as those without children in Central/South America ($p<0.001$).

Table 3 about here

The coefficients for the interactions between region and the presence of children in the household (Model 1) confirm that "modern" labour sharing arrangements within couples are significantly less common when there are children in the household in Australia, Western Europe, and Northern Europe than in Central/South America. In these regions, couples are 25-28 percent as likely to have a modern labour sharing arrangement when children are present (e.g., the odds ratio for the interaction term between Australia and children is 0.51 which, when multiplied by the odds ratio for the main effect of children, 0.55, equals 0.28).

All of these region-specific differences in the effect of a child in the household remained when we controlled the contextual variables, i.e., gender equality, socioeconomic development, and family policies (not shown), but became statistically insignificant in Model 2, which includes the contextual variables as well as their associated cross-level interactions. The contextual variables did not fully explain regional differences in the division of labour (modern arrangements are about three times as likely in North America ($p<0.05$), and five and a half times as likely in Northern Europe ($p<0.01$), than in Central/South America). However, the contextual variables do explain all of the regional difference in how much children impact the division of labour. Differently put, the interaction terms in Model 1 measure the total difference between regions in the effect associated with children, while the interactions between region and child in Model 2 measure the unexplained difference. There are no significant regional differences in the

effect associated with having a child in the household that are not explained by our contextual variables.

What is it about context that shapes how much children affect couples' division of labour? Children are more strongly associated with a retreat from modern labour sharing arrangements in more gender equal countries and higher income countries, but these effects are attenuated in countries where a proportion of paid parental leave is reserved specifically for fathers. The magnitude of these results is expressed graphically in Figure 4 and discussed below. Note that the contextual variables do not shape how couples without children divide labour (none of the main effects are statistically significant in Table 3, Model 2), but three of four cross-level interaction terms between the contextual variables and the presence of a child in the household are significant, showing how context frequently conditions how much having a child matters for the gendered division of labour.

Figure 4 about here

First, in countries with greater gender equality, children seem to have a stronger traditionalizing influence (Fig. 4a). The range on the Global Gender Gap index (GGG) is from 0.64 (South Korea) to 0.86 (Iceland). Taking into account the main effect of having a child (odds ratio=11.53, $p<0.05$) as well as the interaction term between the GGG and having a child (odds ratio=0.02, $p<0.001$), couples with children are 81 per cent as likely as childless couples to have a modern division of labour at the lowest GGG level (the odds ratio at 0.64 is 0.07 and 11.53*0.07=0.81), and 33 per cent as likely at the highest GGG level (11.53*0.03=0.33). Alternately stated, children reduce the odds of a modern division of labour an additional 40 per cent across the range of GGG levels in our sample (0.81*.40=0.33)

An additional $10,000 of GNI predicts that couples with children will be only 90 percent as likely to have a "modern" division of labour as those with children at the lower income level ($e^{-0.11}$=0.90, Fig. 4b). Hence, the model predicts that couples with children in the highest income country in the sample will be only 35 percent as likely to have a "modern" division of labour as couples with children in the lowest income country in the sample. Thus panels A and B of Figure 4 are quite similar in that *higher* levels of national income and gender equality are associated with a *greater* difference in the division of labour between childless couples and those with a child in the household.

While the amount of paid parental leave does not affect childless couples and couples with children any differently[8], having a portion of paid leave reserved for fathers does. In countries that reserve a fathers' quota in their parental leave policy, modern labour sharing arrangements are 40 percent more likely ($p<0.01$). Interestingly, these tend to be countries with high incomes and gender equality (primarily in Northern Europe), suggesting that the fathers' quota has a strong offsetting effect in this region.

4.2.2 Modern division of labour compared to specific alternatives

These same contextual variables that identify the settings in which children are most strongly associated with a retreat from modern labour generally predict traditional arrangements better than either neo-traditional arrangements or the female partner carrying the second shift (results

[8] We measured paid weeks of parental leave continuously in our main models. Other specifications indicated that, in general, any legal provision for paid parental leave decreased the odds of a modern division of labour among parents (but not childless couples). This is probably because even in relatively egalitarian countries, mothers take the bulk of leave that is legally available to either partner (Lappegård 2017).

available upon request). First, the likelihood of couples choosing a traditional rather than modern division of labour is particularly amplified in the most gender equal contexts. Where traditional arrangements are the least common overall, children are most strongly associated with their likelihood.

Second, among couples with children, the likelihood of traditional configurations goes up with national income, but neotraditional and her second shift configurations do not depend on national income. Finally, children are more strongly associated with a traditional division of labour in countries with more generous parental leave policies (see footnote 8). However, the effect of reserving paid leave for fathers has the opposite relationship, with traditional configurations being only 35 percent as likely among couples with children in countries having a fathers' quota than in countries without. A fathers' quota also reduces the likelihood of neotraditional arrangements, but to a lesser degree (neotraditional configurations are 70 percent as likely among couples with children in countries with a fathers' quota than in countries without). In sharp contrast, the fathers' quota *increases* the likelihood of the female partner in the couple carrying the second shift by 37 percent.

Overall, most of the contextual variables predicting a more pronounced retreat from modern labour sharing arrangements among couples with children explain the likelihood of fully traditional labour sharing rather than other means of dividing labour. However, the same fathers' quota that reduces the likelihood of traditional and neotraditional labour sharing increases the likelihood of the woman carrying the second shift.

5 Sensitivity Analyses

5.1 Individual Data

We checked whether our results were sensitive to individual-level measurement issues: proxy reporting, ages and numbers of children, and levels of domestic work. Proxy reporting matters: the overall results seem to be driven by women's reports, which show significant differences associated with the presence of children; this is not the case with men's reports. We also found that our results were driven primarily by households with more than one child. Neither gender equality, socioeconomic development, nor family policy had significant effects on the division of labour among couples with only one child in the household (results available upon request). In Northern Europe and Eastern Europe, having at least two children in the household was *less* associated with a retreat from a modern division of labour than in Central/South America. In other words, couples with more than one child in those two regions are more likely to choose modern labour sharing arrangements than the contextual variables predict.

The estimated effects of the contextual variables were largely insensitive to the ages of children, though having a preschool-aged child in the household was more strongly associated with a retreat from a modern division of labour in Asia and in Eastern Europe compared with Central/South America. Finally, the interaction between having a child in the household and national gender equality was no longer statistically significant when we excluded the 10 percent of our analytic sample with the lightest domestic workloads (under 14 hours per week across both partners). These were disproportionately childless couples in the most gender equal countries, as the correlation between domestic work hours and gender equality was -0.70.

5.2 Measurement of Contextual Variables

We also checked whether the results for our contextual variables were consistent across different operationalizations of the same concepts. When we substituted the United Nation's

Gender Inequality Index (GII)[9] for the GGG, the retreat from a modern division of labour among couples with children was still particularly pronounced in the more gender equal countries. Our finding that a fathers' quota for parental leave helps to offset this effect also remained. However, higher national income no longer predicted a stronger traditionalizing force associated with the presence of a child in the household (the interaction term between GNI and having a child was not statistically significant when gender equality was measured using the GII, unlike the result when gender equality was measured using the GGG). Nonetheless, our results were not sensitive to whether GNI per capita was measured using official exchange rates or using purchasing power parity, nor to whether national income (by either measure) was logged. National income also continued to condition the effect of children on the division of labour even when controlling for the total fertility rate.

With respect to family policy measures, we experimented with including paid maternal leave, paid paternal leave (both from Addati et al. 2014), the amount of vacation and sick leave (OECD 2015), and the affordability of preschool (Economist Intelligence Unit 2012), adding these variables both individually and simultaneously. Affordable preschool actually accentuated the retreat from a modern division of labour among couples with children, as did parental leave when any paid amount was compared to none. Nonetheless, having paid parental leave reserved for fathers significantly contributed to the odds of a modern division of labour among couples with children in all models. We tested whether the father's quota continued to have this effect if

[9] Because both the GGG and the GII incorporate measures of labour force participation, and are therefore potentially endogenous with couples' division of labour, we also recalculated the GII using the UN's methodology (UNDP 2013), but including only health and empowerment components. This did not affect the results.

it was unpaid, and it did not. Research from Canada supports the idea that it is combination of financial benefits and the labelling of "daddy-only" weeks that seems to evoke change in the division of domestic work: Even though couples left some portion of paid parental leave "on the table" prior to the introduction of a father's quota in Quebec, its introduction led to more fathers taking parental leave, and a more egalitarian division of domestic work (Patnaik 2016).

6 Discussion

Parents' division of paid and domestic work is more similar across world regions than the division practiced by childless couples. The most parsimonious way of understanding this pattern is that children seem to exert a stronger traditionalizing force in more advanced countries. Where the division of labour among childless couples is more traditional, children do not seem to add much to traditionalism; where childless couples are more modern, children seem to present a greater challenge to maintaining modern labour sharing. Our work uncovered this general pattern, and in this section we 1) relate the contextual variables to the regional patterns, and 2) discuss why the contextual variables affect the labour sharing patterns among parents, even though they do not predict labour sharing among couples without children in the household.

6.1 Do the Contextual Variables Explain Regional Patterns?

In our separate analyses by world region, we observed more similar labour sharing arrangements between parents and non-parents in Central/South America, Eastern Europe, Southern Europe, Asia, and South Africa, than in Australia, Western Europe, North America, and Northern Europe. Each of the five regions with the smaller differences associated with children has both lower average income and more gender inequality than any of the four regions with larger differences associated with children. Thus children's greater effect on the division of labor in

higher income and more gender equal countries explains the overall regional patterns, but the effect of family policies also contributes to understanding our results.

Specifically, North America and Australia enjoy relatively high levels of socioeconomic development and gender equality, but policy reserving a portion of paid parental leave for fathers is absent in the three countries comprising these regions (except in Quebec, a province comprising about 23 percent of the 2012 Canadian population). Therefore, the proportion of parents practicing a modern division of labour turns out to be virtually identical among North America, Australia, and the five less egalitarian regions. Parental labour sharing in Western Europe is only slightly less modern as a result of greater average gender equality than North America and Australia, but family policy pushes back against the traditionalizing effect associated with children in Belgium and France. With Northern Europe's very high GNI per capita and the highest levels of gender equality among all the regions, we would expect a smaller share of parents having a modern division of labour were it not for compensating family policy. In other words, Northern Europe needs the most "push back", and fathers' quotas are more common there than elsewhere.

The contextual variables thus help us understand the regional patterns in parents' retreat from a modern division of labour. They also predict regional differences in the growth in fully traditional labour sharing associated with the presence of children. The greatest percentage increases in traditional labour sharing were in the regions where a fully traditional division of labour among childless couples was very rare (e.g., only 2.4 percent and 5.4 percent of couples without a child in the household practiced traditional labour sharing in Northern Europe and Australia, respectively).

Nonetheless, the contextual variables are less helpful predicting the contexts in which neo-traditional or her second shift arrangements will be especially common among parents. For instance, neo-traditional arrangements are actually less common when there is a child in the household in Asia, and our multilevel model does nothing to explain why. Fully traditional arrangements are more frequently chosen than would be expected based on national gender equality, national income per capita, and family policies. The quality of available part-time work surely differs in ways not measured by these variables, and may also help explain why neo-traditional configurations are not more commonly chosen among parents in North America.

Similarly, in Australia and Eastern Europe, women with children are actually less likely to be burdened with the "second shift" than childless women are. In these two regions, children push back on the first half of the gender revolution (women's participation in paid work), making traditional and neo-traditional arrangements more likely than ones where paid work is equally shared. This might be expected in Eastern Europe, where former Communist countries have had high rates of female labour force participation (the region has the highest proportions of women doing at least as much paid work as their partners among all the regions), but is more surprising in Australia, where equal sharing of paid work is not particularly common among childless couples, and uniquely uncommon among parents. In contrast, Northern Europe stands out as the region where the presence of children is associated with a greatest likelihood of women carrying the second shift. Here the chances of an egalitarian division of paid labour are not strongly related to the presence of children, but domestic labour sharing is more gendered among parents, thus leaving many women with a second shift.

6.2 Understanding How Context Influences Parents

Why do children seem to exert a stronger traditionalizing force in richer and more gender equal countries, particularly those that do not structure parental leave to encourage fathers' involvement at home? One explanation is that in less equal societies, women commonly adopt traditional labour sharing patterns when they form unions (Anxo et al. 2011), so the arrival of children has little additional impact. Where equality is more normative, union formation alone does not present a substantial barrier to the gender revolution. Similarly, where childbearing is a less optional part of the adult life course, the division of labour among childless couples may reflect the expectation of future children to a greater degree than where remaining childless is a more socially acceptable option.

We further contend that egalitarian norms shape the behaviour of childless couples more forcefully than they shape the behaviour of couples with children. One simple reason for this is that it is easier to divide a small amount of domestic work in an egalitarian fashion than it is to equally divide the larger amounts of hours small children require. By increasing the total amount of domestic work required, children encourage specialization. It is hardly surprising that such a force would push back toward more traditional gender roles during an incomplete gender revolution.

Another reason that also puts emphasis on the total amount of domestic work is that children can move couples' lives into the private sphere. For instance, a dual-earner couple might easily substitute restaurant meals for home-prepared food, and adding a single child does not add tremendously to the restaurant bill—but couples with more than one child might be more likely to favour the cost savings of home production. Similarly, doing laundry at home makes the most sense when there is a lot of it. Our results were driven by couples with two or more children, and this might indicate that couples with one child are more likely to be able to maintain labour

sharing patterns that resemble their childless counterparts, but when the workload and cost of outsourcing go up, women's share of the domestic workload increases more than men's.

It is, of course, not necessary for more domestic work to fall disproportionately on women. It might seem that in the most gender equal countries, there would be the greatest chance that the additional time demands associated with children would be equally shared. Our results indicate that, at least at this point in the gender revolution, it is harder to be egalitarian with at least two children (see Hart et al. 2017 who also discuss how parous couples have a more difficult time living up to the ideals of a modern relationship.) Nonetheless, Northern and Eastern European couples are more likely to practice modern labour sharing when they have at least two children than the contextual variables predict. It seems that high rates of women's paid labour force participation may have an indirect effect supporting a more modern division of domestic work.

Children also seem to exert a more traditionalizing force in higher income countries, and we suspect that a large part of the explanation for this can be found in the intensive parenting norms that are common in higher income countries (Coltrane 1997, Lareau 2011, Bianchi et al. 2012). The time demands associated with intensive parenting seem to have fallen more heavily on mothers than fathers. Investments in children generally increase with lower fertility (Becker and Lewis 1974), but the degree to which these investments include intensive parenting rather than being primarily investments in education also depends on context (Sayer and Gornick 2012).

It is somewhat surprising that the division of labour among parents is not more responsive to generous welfare states. Overall, the likelihood of a modern division of labour did not depend on the amount of paid parental leave, nor did it depend on overall benefits, nor on

most specific benefits (section 5.2). Where preschool was more affordable or parental leave more generous, parents were actually *less* likely to practice a modern division of labour (section 5.2).

Thus while outsourcing can promote gender equality in the private sphere, it is not enough for welfare states to promote "de-familialization" by financially supporting alternatives to private care (Esping-Andersen 2000). The only policy we identified that supports men being at least equally involved in domestic work was having a portion of *paid* parental leave reserved specifically for fathers. And even here, our results present a policy challenge: having a fathers' quota in parental leave policy makes both traditional and neo-traditional arrangements less likely, and it increases the probability of modern labour sharing among parents—but it also increases the probability that mothers will carry a second shift. In other words, a fathers' quota seems to support mothers' participation in the first half of the gender revolution, but it seems less effective in promoting the second half. Other work has shown that some policy supports, most notably lengthy maternal leave from paid work, encourage specialization within couples whereas others, like universal preschool, encourage gender equality (Hook 2006, 2010; Gornick and Meyers 2008; Cooke and Baxter 2010; Nielson and Stanfors 2014). We emphasize that affordable preschool can support gender equality in paid work while not promoting private sphere equality to the same extent.

Moreover, despite the fact that more generous family policies help keep fertility levels closer to replacement (Castles 2003; Rindfuss et al. 2016), two-child families push back against the gender revolution to a greater extent than one-child families. Gender equality in the private sphere is thus more difficult to achieve where fertility promotion is successful. At this point in the gender revolution, children present a substantial barrier in countries with more sustainable fertility levels.

6.3 Limitations

Work such as ours based on cross-sectional data does not, of course, measure how much the division of labour changes when a child enters the family. When we compare couples with and without children, the estimates are subject to endogeneity: More traditional couples may be more likely to have children, and therefore differences between couples with and without children may not result solely from children having a causal impact. Further, time diaries would have provided superior measures of time allocation compared to the weekly recall data we used (especially given that respondents reported on partners' time use). Nevertheless, ISSP data allowed us to assess the effect of children on couples' division of labour in a wide variety of countries, and our results for previously studied countries seem consistent with studies using longitudinal data and better time measures. We recommend that further work on how context helps determine whether children are barriers to the gender revolution consider housework and child care separately as it is more difficult to outsource child care where intensive parenting norms prevail.

7 Conclusion

We started this investigation assuming that even though children increase mothers' workload more than fathers' at this point in an incomplete gender revolution, that children would likely present the least substantial barriers to the gender revolution in the most progressive countries. Instead, our findings indicate children become more substantial barriers to the gender revolution as countries advance in national income and national gender equality. Generous family policy can in fact make modern labour sharing arrangements less likely by promoting childbearing. Nonetheless, when family policy is structured so that couples lose a portion of paid parental leave if they do not share it, mothers are less likely to retreat from paid hours (see also Oláh et al. 2017). Unfortunately, the same policy tends to promote mothers carrying a second shift at home.

This highlights the fact that the second half of the gender revolution—equal participation in domestic work—is more difficult to achieve with children than the first half (equal participation in paid work). Not withstanding this observation, our work also suggests that the first half of the gender revolution can help propel the second, as the retreat from a modern division of domestic labour associated with having at least two children was least pronounced in Northern and Eastern Europe—the two regions where the division of paid work was the least traditional among childless couples.

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Table 1: Descriptive statistics of the dependent variable, couples' division of labour, from the 2012 ISSP survey

		Dependent variable				Individual-level variables					
Region/country	**n**	Tradi-tional (%)	Neo-tradi-tional (%)	Her second shift (%)	Modern (%)	Age (mean)	Edu-cation level (mean)	Female (%)	Child in house-hold (%)	Pre-school child (%)	Two or more children (%)
Western Europe	**3,388**	**14.1**	**30.6**	**16.8**	**38.5**	**40.1**	**2.4**	**53.7**	**59.8**	**29.1**	**36.3**
Austria	354	12.0	35.9	19.7	32.5	40.0	1.6	54.4	60.0	18.3	44.4
Belgium	643	7.2	28.3	22.6	41.9	39.7	2.5	50.3	60.3	29.6	38.1
France	717	8.3	23.4	21.0	47.3	38.5	2.3	55.3	65.9	33.6	40.6
Germany	548	19.7	35.6	11.3	33.4	41.4	2.5	54.0	57.0	21.6	30.7
Ireland	372	24.6	22.9	16.8	35.7	39.1	2.8	52.2	72.3	45.5	46.9
Netherlands	331	16.6	36.0	10.0	37.5	41.8	2.7	61.4	58.8	26.8	37.4
Switzerland	423	19.2	39.2	9.7	31.9	42.1	2.4	51.3	56.5	26.0	33.8
Northern Europe	**1,578**	**6.1**	**17.8**	**20.5**	**55.6**	**40.1**	**2.7**	**50.7**	**66.8**	**35.3**	**43.5**
Finland	396	8.4	13.3	21.3	56.9	38.9	2.5	47.4	62.3	35.8	40.5
Iceland	368	7.9	28.0	18.8	45.4	39.1	2.6	47.2	74.0	41.4	49.7
Norway	487	2.9	14.4	21.6	61.2	40.9	3.0	51.3	68.6	31.8	44.8
Sweden	327	5.8	16.8	19.9	57.5	41.3	2.7	58.1	61.5	32.4	38.2
Australia	**491**	**19.0**	**31.5**	**16.4**	**33.2**	**40.5**	**2.3**	**53.3**	**60.0**	**27.1**	**44.4**
North America	**577**	**19.8**	**14.7**	**17.6**	**47.8**	**41.6**	**2.4**	**55.5**	**50.1**	**19.6**	**31.8**
Canada	170	11.5	15.0	18.6	55.0	45.9	2.7	56.0	49.8	13.2	31.8
United States	407	23.2	14.7	17.2	45.0	39.8	2.2	55.2	50.3	22.1	31.8
Southern Europe	**1,492**	**13.3**	**20.3**	**39.0**	**27.3**	**42.0**	**2.0**	**54.4**	**60.1**	**28.4**	**30.0**
Croatia	274	10.3	17.0	46.7	26.1	40.9	1.9	50.7	59.5	34.1	33.8
Portugal	196	10.5	14.8	47.1	27.6	40.9	1.8	55.0	64.2	28.0	27.9
Slovenia	312	11.2	14.4	58.3	16.0	42.1	1.9	54.8	59.9	23.1	29.5
Spain	710	16.2	25.7	25.5	32.6	42.6	2.1	55.3	59.3	28.8	29.4

Eastern Europe	**2,210**	**19.0**	**19.1**	**34.9**	**27.1**	**38.9**	**2.2**	**52.4**	**63.8**	**32.5**	**31.9**
Czech Republic	590	17.1	24.5	35.9	22.6	38.6	2.0	52.4	55.4	31.2	30.3
Hungary	241	23.2	12.8	44.0	20.1	39.6	1.7	54.1	63.6	27.7	33.5
Latvia	300	19.6	14.5	34.0	32.0	38.1	2.5	51.3	69.0	38.9	29.3
Lithuania	221	18.7	20.1	32.6	28.6	39.4	2.2	48.9	64.5	34.9	27.9
Poland	298	13.6	24.8	24.2	37.4	37.8	2.6	53.6	68.5	31.8	38.0
Russia	246	30.2	13.8	29.6	26.3	36.8	2.3	54.1	71.6	38.1	28.0
Slovak Republic	314	15.1	16.8	43.5	24.7	40.3	2.1	52.3	61.8	27.0	35.8
South Africa	**337**	**24.4**	**12.3**	**28.6**	**34.8**	**39.4**	**1.6**	**63.3**	**64.4**	**52.5**	**41.3**
Asia	**2,093**	**29.1**	**20.3**	**19.9**	**30.7**	**38.3**	**1.9**	**55.6**	**80.9**	**47.0**	**57.1**
India	465	20.3	0.3	22.4	57.1	31.9	1.2	**45.7**	87.4	59.7	62.6
Israel	388	15.2	35.6	22.4	26.8	38.9	2.1	63.9	83.5	53.4	66.5
Japan	356	28.9	44.9	14.3	11.8	42.0	2.3	58.2	66.3	28.7	41.3
Philippines	493	42.2	12.5	14.9	30.4	37.8	1.5	57.8	91.7	58.0	69.0
South Korea	391	35.3	16.4	25.1	23.3	41.9	2.3	54.1	72.4	32.2	43.8
Central/South America	**1,325**	**34.4**	**13.2**	**20.9**	**31.6**	**37.9**	**1.4**	**50.2**	**79.1**	**51.6**	**51.5**
Argentina	265	37.6	24.7	17.7	20.0	37.5	1.1	54.5	77.7	39.9	46.7
Chile	331	45.6	13.6	21.8	18.9	38.7	2.7	51.0	78.1	42.9	46.5
Mexico	458	32.1	10.5	19.4	38.0	37.3	1.3	48.0	76.4	59.4	54.4
Venezuela	271	18.3	5.9	24.9	50.9	38.0	1.6	48.3	86.6	62.6	58.9
Total	**13,491**	**18.9**	**21.6**	**23.8**	**35.7**	**39.7**	**2.2**	**53.5**	**66.1**	**35.4**	**40.7**

Table 2: Contextual variables: variables in the main models in bold, variables used for robustness check in plain text

	Gender Equality			**Family Policy**						**National income in 10,000s**	
Region/ country	**Global Gender Gap Index**	1-Gender Inequality Index	1-Gender Inequality Index with labour force component removed	**Weeks of paid parental leave**	**Paid leave reserved for fathers?**	Any leave reserved for fathers?	Weeks of paid maternity leave	Weeks of paid paternity leave	Index of pre-school affordability	Weeks of vacation or sick leave	**GNI per capita 2012**	GNI per capita PPP 2012
Western Europe												
Austria	**0.727**	0.898	0.847	**31.1**	**no**	no	16.0	0.0	65.4	10.0	4.835	4.322
Belgium	**0.781**	0.932	0.922	**0.1**	**yes**	yes	11.7	1.7	78.5	9.3	4.708	4.332
France	**0.759**	0.917	0.873	**13.6**	**yes**	yes	16.0	2.2	76.6	24.5	4.093	3.646
Germany	**0.778**	0.925	0.889	**34.8**	**no**	no	14.0	0.0	66.6	29.7	4.393	4.137
Ireland	**0.785**	0.879	0.819	**0.0**	**no**	yes	20.8	0.0	52.5	6.9	4.839	3.511
Netherlands	**0.773**	0.943	0.944	**0.0**	**no**	yes	14.0	0.4	70.7	20.2	5.250	4.767
Switzerland	**0.780**	0.943	0.916	**0.0**	**no**	no	11.2	0.0	70.4	5.0	8.330	5.487
Northern Europe												
Finland	**0.845**	0.925	0.883	**21.8**	**no**	no	12.6	6.5	84.2	24.0	4.724	3.821
Iceland	**0.859**	0.911	0.857	**10.4**	**no**	no	10.4	14.4	82.6	36.0	4.422	3.355
Norway	**0.837**	0.935	0.898	**47.2**	**yes**	yes	36.0	1.4	92.4	28.1	9.964	6.403
Sweden	**0.817**	0.945	0.916	**56.0**	**yes**	yes	11.2	1.6	86.7	16.9	5.713	4.316
Australia	**0.741**	0.885	0.824	**7.3**	**no**	no	**0.0**	1.1	**60.6**	2.5	6.751	4.317
North America												
Canada	**0.746**	0.881	0.812	**19.3**	**no**	no	8.3	0.0	51.9	6.0	5.102	4.154
United States	**0.746**	0.744	0.613	**0.0**	**no**	yes	0.0	0.0	63.0	0.0	5.150	5.061
Southern Europe												
Croatia	**0.708**	0.821	0.730	**0.0**	**no**	no	34.0	1.4	65.0	15.2	1.324	1.976
Portugal	**0.724**	0.884	0.797	**23.3**	**yes**	yes	17.0	4.0	53.0	10.5	2.115	2.645
Slovenia	**0.744**	0.920	0.877	**33.3**	**no**	no	15.0	5.3	52.5	12.2	2.249	2.647
Spain	**0.733**	0.897	0.849	**0.0**	**no**	yes	16.0	3.0	60.6	22.5	2.899	3.178

Eastern Europe												
Czech Republic	**0.674**	0.878	0.823	**109.2**	**no**	no	19.6	0.0	66.5	28.0	1.967	2.455
Hungary	**0.676**	0.753	0.666	**93.6**	**no**	no	16.8	1.0	54.2	17.6	1.286	2.199
Latvia	**0.769**	0.784	0.670	**109.2**	**yes**	yes	12.8	1.6	60.0	8.4	1.395	2.102
Lithuania	**0.721**	0.843	0.753	**44.2**	**no**	no	18.0	6.0	77.6	4.8	1.417	2.276
Poland	**0.705**	0.860	0.793	**52.0**	**no**	no	26.0	2.8	56.5	13.2	1.288	2.092
Russia	**0.693**	0.688	0.540	**31.2**	**no**	no	20.0	0.0	36.0	6.4	1.409	2.276
Slovak Republic	**0.681**	0.829	0.744	**45.8**	**no**	no	22.1	0.0	59.0	8.0	1.715	2.437
South Africa	**0.753**	0.537	0.371	**0.0**	**no**	no	**10.2**	0.6	**36.9**	11.4	0.759	1.119
Asia												
India	**0.646**	0.390	0.264	**0.0**	**no**	no	12.0	0.0	19.5	6.4	0.149	0.384
Israel	**0.701**	0.856	0.774	**0.0**	**no**	yes	14.0	0.0	58.8	3.6	3.252	2.807
Japan	**0.658**	0.869	0.814	**52.0**	**yes**	yes	9.3	0.0	57.2	5.2	4.668	3.632
Philippines	**0.781**	0.582	0.432	**0.0**	**no**	no	9.0	1.4	24.8	3.0	0.259	0.440
South Korea	**0.640**	0.847	0.781	**20.8**	**no**	no	13.0	0.0	64.0	5.0	2.464	3.089
Central/South America												
Argentina	**0.732**	0.620	0.480	**0.0**	**no**	no	13.0	0.4	39.4	5.0	1.468	
Chile	**0.698**	0.640	0.501	**12.0**	**no**	no	18.0	1.0	62.1	6.0	1.525	2.159
Mexico	**0.690**	0.618	0.492	**0.0**	**no**	no	12.0	0.0	36.3	2.8	0.982	1.663
Venezuela	**0.685**	0.534	0.371	**0.0**	**no**	no	26.0	2.0	68.0	4.0	1.273	1.312

Table 3: Odds ratios from multilevel logistic regression predicting a modern division of labour

	Model 1		Model 2	
Individual level variables				
Age (ref=18-29)				
30-44	0.75	***	0.75	***
44-55	0.60	***	0.60	***
Respondent's education	1.24	***	1.24	***
Respondent's gender (ref=male)	0.59	***	0.59	***
Child in household	0.55	***	11.53	*
Contextual variables				
Region (ref=Central/South America)				
E Europe	0.75		1.26	
S Europe	0.65		0.71	
Asia	0.97		1.12	
Australia	1.48		2.43	
S Africa	1.19		1.09	
Western Europe	1.53		2.16	
N America	2.04		2.97	*
N Europe	3.16	**	5.50	**
Global Gender Gap Index (GGG)			1.11	
Gross national product per capita (GNPpc)			0.92	
Paid parental leave			0.99	
Fathers' quota			1.24	
Cross-level interactions				
Region*child in household (ref=C/S America)				
E Europe*child in hh	0.80		1.07	
S Europe*child in hh	0.87		1.09	
Asia*child in hh	0.88		0.88	
Australia*child in hh	0.51	**	1.10	
S Africa*child in hh	1.04		1.21	
Western Europe*child in hh	0.45	***	0.80	
N America*child in hh	0.64		1.19	
N Europe*child in hh	0.52	***	1.52	
GGG*child in hh			0.02	*
GNPpc*child in hh			0.90	**
Paid parental leave*child in hh			1.00	
Fathers' quota* child in hh			1.40	**

_cons	0.94		1.01	
/lnsig2u	-1.47	-0.26	-1.88	0.26
sigma_u	0.48	0.06	0.39	0.05
rho	0.07	0.02	0.04	0.01
LR test of rho=0: chibar2(01) =	507.41	***	303.10	***
Log likelihood	-7881.25		-7865.07	
n, individuals	13,431		13,431	
n, countries	35		35	

Figure 1: 2012 ISSP countries

Region	**Countries**
Western Europe	Austria, Belgium, France, Germany, (Great Britain[1]), Ireland, Netherlands, Switzerland
Northern Europe	(Denmark[2]), Finland, Iceland, Norway, Sweden
Southern Europe	Croatia, Portugal, Slovenia, Spain
Eastern Europe	(Bulgaria[1]), Czech Republic, Hungary, Latvia, Lithuania, Poland, Russia, Slovakia
North America	United States, Canada
Oceania	Australia
Asia	(China[3]), India, Israel, Japan, Philippines, South Korea, (Taiwan[1]), (Turkey[4])
Latin America	Argentina, Chile, Mexico, Venezuela
Africa	South Africa

[1] Excluded because the question on the number of partner's paid work hours was not used.

[2] Excluded because the question identifying coresidential unions was not used.

[3] Excluded because the hours worked question asked "did you work for more than one hour last week?"; in other countries, the question was total hours worked in a typical week.

[4] Excluded because questions on the number of children in the household were mistakenly omitted from the ISSP questionnaire.

Fig. 2a. Percentage of Couples with a 'Modern' Work-Family Configuration, by Region

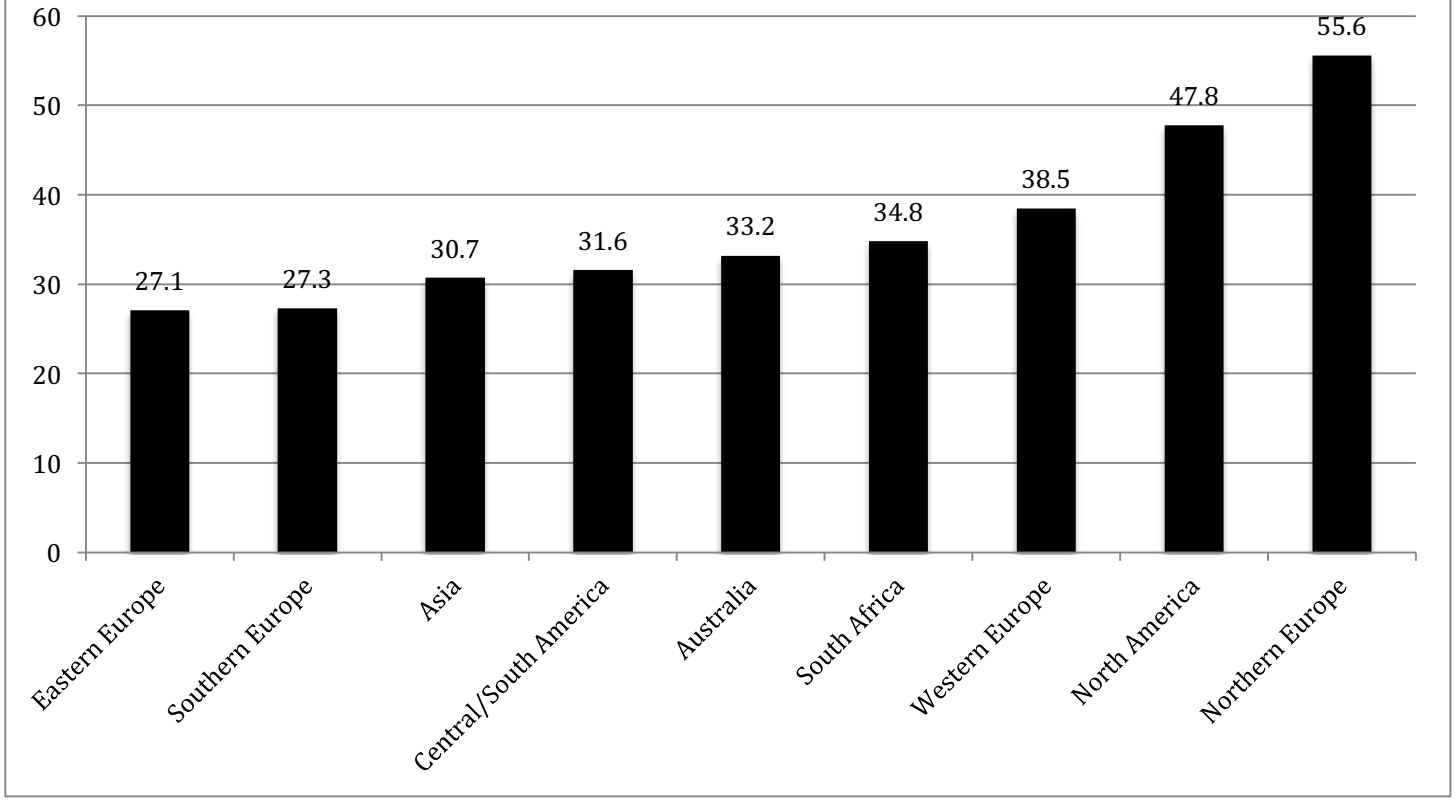


Figure 2b: Predicted probabilities of a modern division of labor for households with and without children

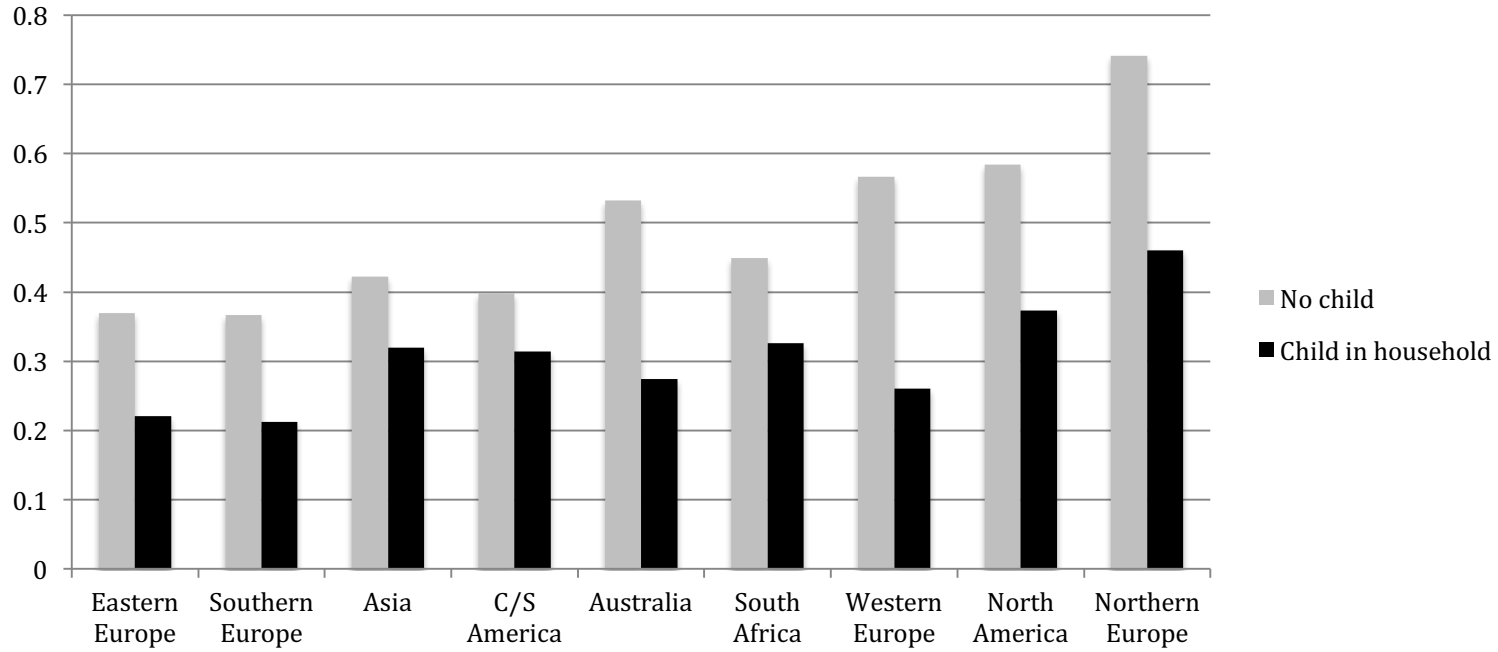
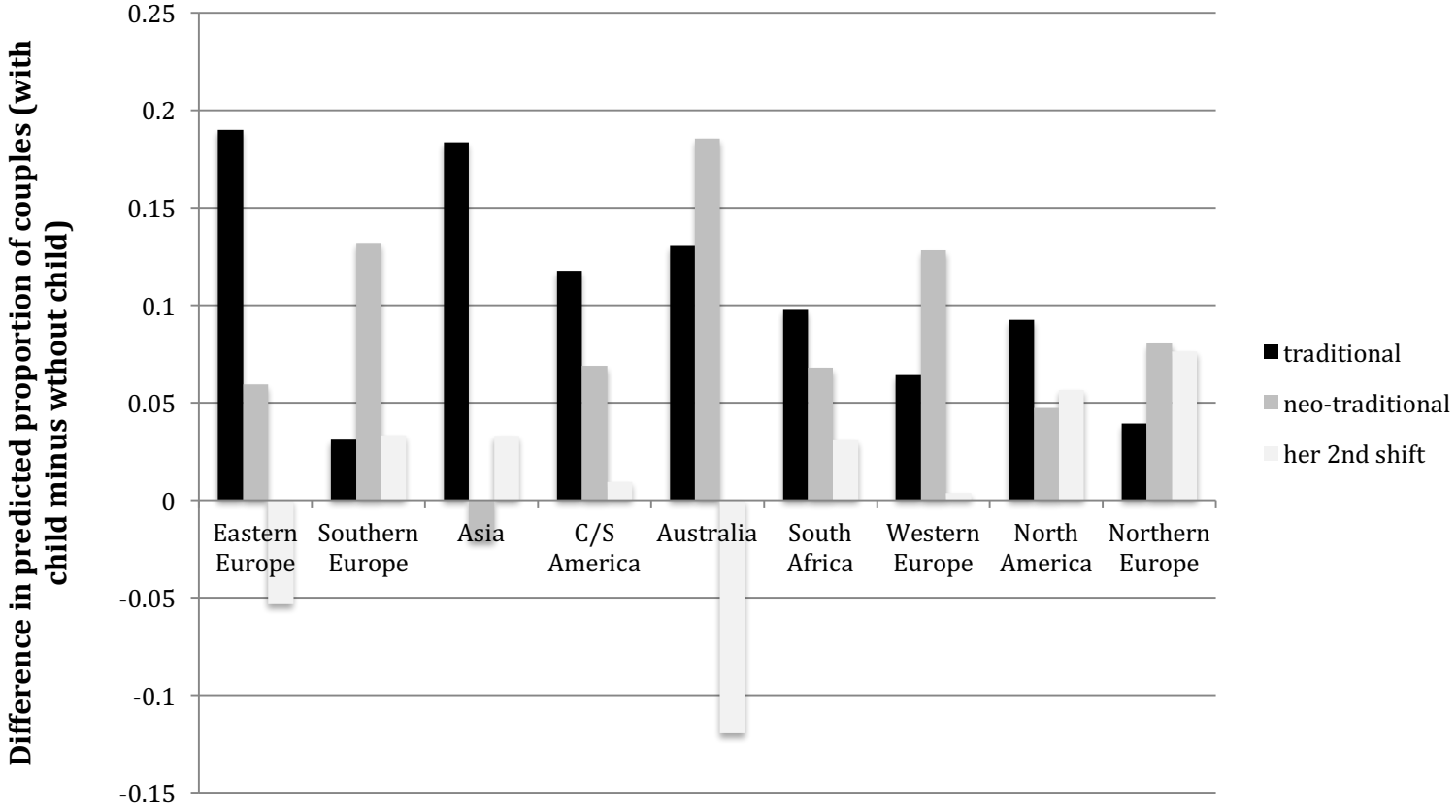


Fig 3: Standardized differences in the division of labour associated with having a child in the household



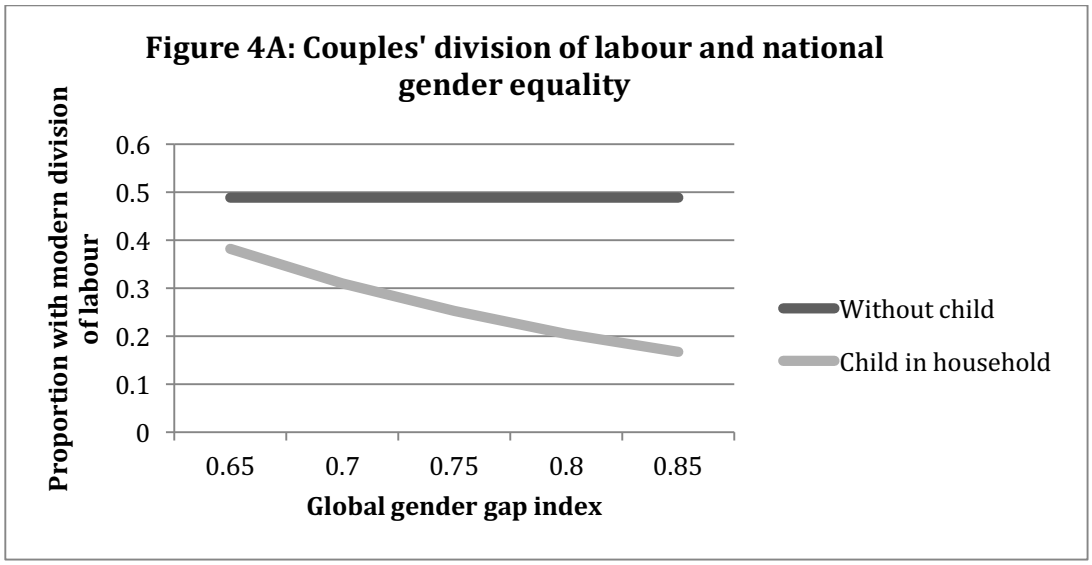


Figure 4A: Couples' division of labour and national gender equality
Proportion with modern division of labour
0.6
0.5
0.4
0.3
0.2
0.1
0
0.65
0.7
0.75
0.8
0.85
Global gender gap index
Without child
Child in household

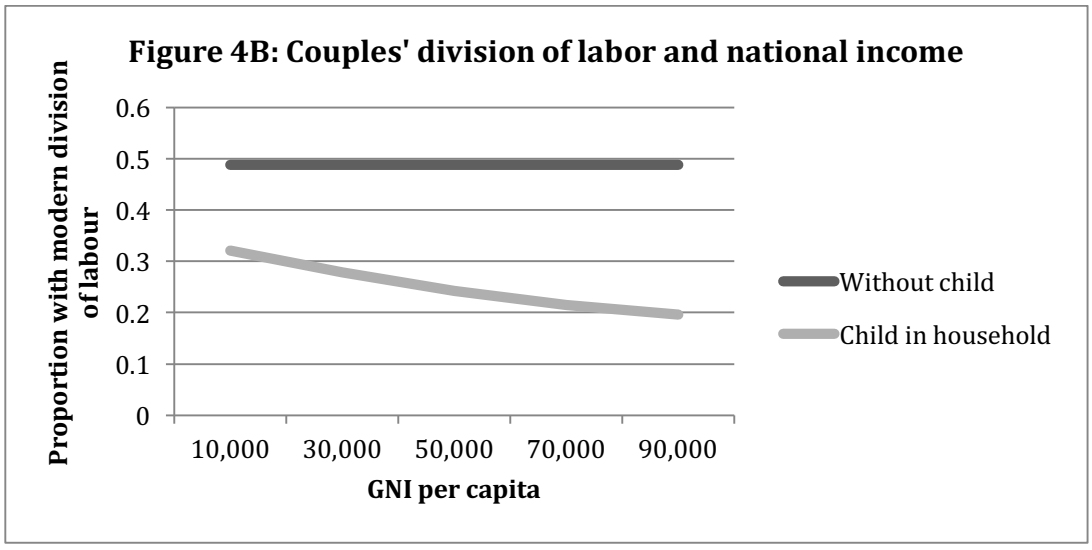


Figure 4B: Couples' division of labor and national income
Proportion with modern division of labour
0.6
0.5
0.4
0.3
0.2
0.1
0
10,000
30,000
50,000
70,000
90,000
GNI per capita
Without child
Child in household


Figure 4C: Couples' division of labour and family policy
Proportion with modern division of labour
0.6
0.5
0.4
0.3
0.2
0.1
0
no
yes
Portion of paid parental leave reserved for fathers?
Without child
Child in household

Appendix Table A: Logistic regression results predicting a "modern" division of labour, separately by world region

	North America		Northern Europe		Australia		Western Europe		Asia	
Age (ref=18-29)										
30-44	-0.65	*	-0.49	**	-0.64		-0.29	*	-0.42	***
45-55	-0.30		-0.69	***	-0.38		-0.81	***	-0.57	***
Education	0.16		0.25	***	0.26	*	0.23	***	-0.21	***
Gender (ref=male)	-0.30		-0.83	***	1.23	***	-0.56	***	-1.39	***
Child in household	-0.87	***	-1.28	***	-1.22	***	-1.38	***	-0.50	***
constant	0.54		1.36	***	-0.83		0.51	***	1.20	***
n	577		1572		484		3379		2085	

	Southern Europe		Eastern Europe		Central/South America		South Africa	
Age (ref=18-29)								
30-44	-0.54	*	-0.11		-0.28		-0.01	
45-55	-0.99	***	-0.27		-0.11		-0.24	
Education	0.35	***	0.22	***	0.21	***	0.22	
Gender (ref=male)	-0.28	*	-0.08		-0.57	***	-0.91	***
Child in household	-0.80	***	-0.73	***	-0.38	**	-0.56	*
constant	-0.43		-0.83	***	-0.26		0.10	
n	1483		2205		1316		330	