

## **Gender Division of Labor and Perceived Fairness within Couples: Implications for Continued Childbearing in Germany**

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Extended abstract to be submitted to the European Population Conference 2014, 25-28 June 2014  
Budapest, Hungary

### BACKGROUND

Much of the literature on fertility research, particularly in a cross-country perspective, focuses on the growth in women's economic autonomy, the accompanying increase in the opportunity costs of motherhood and therewith the importance of regulations and structures that support work-life balance, such as the availability of childcare or income-related parental leave arrangements. McDonald (2000) suggested that higher levels of gender equity in a society in combination with increasing gender equity within the family tend to raise fertility. Nevertheless, if the increase in gender equity in institutions such as education and the labor market is associated with low levels of gender equity within the family, women might feel overburdened and might opt to have fewer children than they otherwise would have intended (McDonald 2000). Along these lines, more recent research adds another dimension by pointing at the importance of within-couple negotiations concerning the gender division of labor for fertility decisions (Mills 2010). Results suggest that families with more equitable arrangements in the division of labor display higher fertility (Oláh 2003; Torr/Short 2004). However, in a society with strong norms about the responsibility of childcare, such as in the western part of Germany, a non-egalitarian division of labor within the family might be preferred at least temporarily. What seems to be even more important than the actual division of labor is therefore the perceived fairness of this division (Andrade/Bould 2012). The perception of fairness can vary across time, countries and social groups. This pertains not only to childless couples, but even more so to couples who already have at least one child. They already gained experience in the way domestic tasks, childrearing and employment were divided following the birth of their previous children.

Existing studies focus on a variety of European countries and the US (Torr/Short 2004: USA; Jansen/Liefbroer 2006: Netherlands; Brodman et al. 2007: Denmark/Sweden; Mills et al. 2008: Italy/Netherlands; Cooke 2009: Italy/Spain; Neyer et al. 2013: 11 countries; Dommermuth/Hohmann-Marriott 2013: Norway). While many of these results suggest that families with more equal arrangements in the division of labor display higher fertility, others found the contrary. This might be the result of different measurements of both fertility and division of work. Many of those studies focused on fertility intentions and did only consider actual division of tasks and sometimes satisfaction with division of labor. Satisfaction, however, can only be a proxy for fairness by assuming that people would not be satisfied with a division of tasks that they perceive as unjust. The perception of fairness is a more direct and appropriate measure. Only few datasets have the advantage to assess the relative impact of the actual division of labor and its perceived fairness on the transition to childbearing.

With this study we want to contribute to the existing research by evaluating the impact of the division of employment, child care and housework within couples on childbearing as compared to its perceived fairness. Does the actual division of labor among partners have an impact on the transition to a first or further child? Is this impact mediated through the perceived fairness of the division of labor or does perceived fairness have an additional influence on childbearing? We apply a life-course perspective by focusing on the transition to first, second and higher-order births. To detect any causal impact on fertility, fairness and the division of work within couples were measured prior to

the birth of first and subsequent children. First, we assume that the perception of fairness should matter at least as much for childbearing as the actual division of paid and unpaid work. The division of household labor and child care might be practiced unequally but as long as such a practice is perceived as fair it may not restrict childbearing. Second, we assume that the effect of the division of labor and of its perceived fairness might be negligible for the transition to the first birth and should be more pronounced for continued childbearing. After childbirth couples might experience a shift towards more traditional roles and a clash between expectations and reality is likely to reduce the likelihood of having another child.

## METHOD

### *Data*

This study is based on data from the 2008/09-launched German family panel pairfam (“Panel Analysis of Intimate Relationships and Family Dynamics”), a multi-disciplinary, longitudinal study for researching partnership and family dynamics in Germany (Huinink et al. 2011). The annually surveyed nationwide random sample includes information from more than 12.000 respondents of the birth cohorts 1971-73, 1981-83 and 1991-93, as well as information on their partners, parents, and children. In 2009/10, a subsample (DemoDiff) was drawn that oversampled eastern Germans of the cohorts 1971-73 and 1981-83. This sample, which enhances the possibilities to conduct in-depth comparisons of the eastern and western German population, was motivated by the observation that marked differences in family dynamics between eastern and western Germans remained, even for those cohorts that were raised after unification (Kreyenfeld et al. 2012). By now, there are four waves of data from the German family panel available.

### *Sample Selection*

We studied childless cohabiting or married couples at wave 1 for the transition to a first birth and cohabiting or married couples with at least one common child in any of the waves for the transition to second or higher-order births. Respondents belong to the two oldest birth cohorts 1971-1973 and 1981-1983. We followed them over all four waves by using yearly information. Censoring occurred in case of separation or date of interview had no event occurred. For parents, we analyzed only respondents whose youngest child was younger than seven years of age. We made this restriction for three reasons: first, to gather a more homogeneous group of respondents, second, because most of the births occurred within five years after the previous birth and third, because we think that the division of child care is especially important for parents with children of this age group. Finally, our sample includes 1700 childless respondents, 1554 one-child parents and 2586 parents with two and more children (see table 1).

Table 1: Sample size and number of events

	Childless couples	Parents with one child	Parents with two or more children
Men	837	624	1002
Women	863	930	1537
<i>N</i>	<i>1700</i>	<i>1554</i>	<i>2586</i>
<i>Events</i>	<i>391 first births</i>	<i>386 second births</i>	<i>230 third or higher-order births</i>

Source: German family panel 2008/2009 – 2011/2012 (wave 1-4)

### *Variables*

*Dependent variable.* Our dependent variable is the transition to a first or further child with the same partner. To avoid any problems of causality, for respondents who were not pregnant in the previous wave but became parents in the current wave, we used the information of the birth date of the child and predated the event to occur eight months before the occurrence of the actual birth. If the pregnancy started in the previous wave, we used any information of our independent variables from

the wave before the previous wave. If the pregnancy started in the current wave, we used any information of our independent variables from the previous wave. For respondents who were not pregnant in the previous wave but declared themselves pregnant in the current wave, we took the information of the independent variables from the previous wave and analyzed its impact on the current pregnancy.

*Independent variables.* The key explanatory variables regard the division of housework and employment. They are all time-varying variables and were lagged by one year previous to the event to detect any causal impact on childbearing. We included two variables that indicate the division of labor within the family: *division of child care and housework*. Housework means doing the laundry, cooking and cleaning. Both of these activities can be done completely by the woman, for the most part by the woman, shared 50/50 or completely by the man. *Couples employment arrangement* considers five categories: both work full-time, man works full-time/woman part-time, man works full-time/woman is on parental leave, man works full-time/woman is not employed, and other combinations. The *perception of fairness* regards the division of housework and paid work. In wave 1 and wave 3 the respondent were asked whether they do more than their fair share of work, about their fair share or less than their fair share. We recoded this variable using information from both men and women and constructed a new variable that indicates whether the woman states she does more than her fair share of work or the man states that he does less than his fair share of work. In both cases this would be labeled as *unfair to the woman* in our new fairness variable.

We also controlled for a few other variables that have been found important in previous research: duration since age 14 (for childless couples) or age of youngest child (for parents), duration of cohabitation, whether the respondent is in a marital or non-marital union, relationship satisfaction, highest vocational degree of respondent and partner, whether the respondent is currently living in eastern or western Germany (all of these are time-varying variables and also lagged by one year). Time-constant variables include birth cohort, number of children and siblings.

#### *Analytic strategy*

We used discrete-time logistic regression models for whether a pregnancy occurs in a given year. We estimated robust standard errors to account for the correlation in the error terms stemming from using multiple observations on individuals.

### PRELIMINARY RESULTS

#### *Descriptive results*

Regarding the division of work, we find a clear distinction between childless couples and parents. Couples take on more traditional roles after a child arrives. After child birth, the share of full-time employed couples decreases dramatically and female part-time employment increases (Figure 1). While the majority of childless couples still shares housework tasks equally, in families with children women do most of the routine housework. However, there are some differences in the division of housework between couples in eastern and western Germany. Parents in the eastern part of Germany share housework tasks more equally than western German parents (Figure 2). The same can be seen for the division of child care: fathers in eastern Germany more often take over child care tasks than fathers in the western part of Germany. Even though we find notable differences in the division of work between childless couples and parents, the perception of fairness regarding this division does not differ between both groups (Figure 3). About three quarter of all couples perceives the division of paid and unpaid work as fair to the woman. In addition, the feeling of fairness is the same in both parts of Germany – despite obvious differences in actual behavior, there are no differences in the perception of fairness.

Figure 1: Couples' employment arrangement by parenthood status

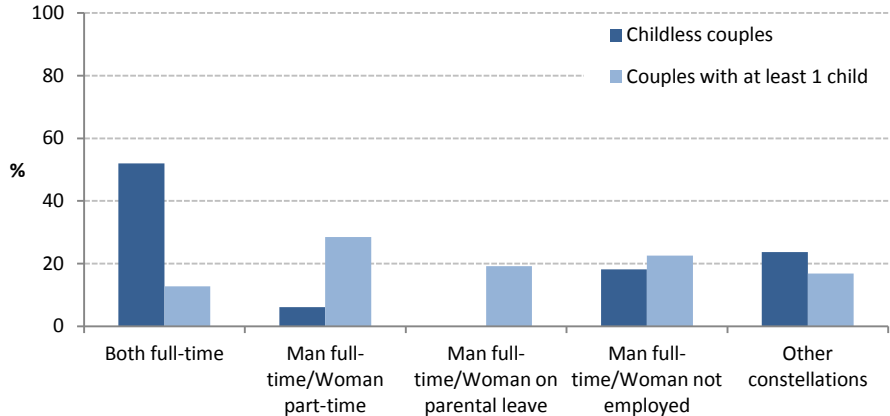


Figure 2: Division of routine housework by parenthood status and region of Germany

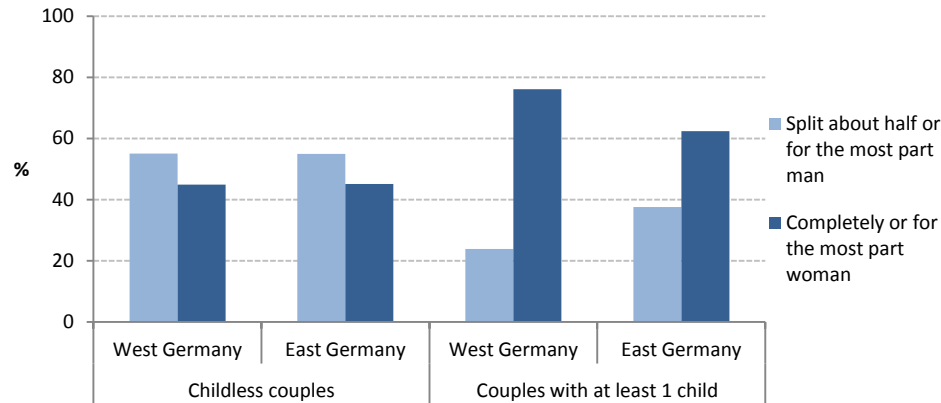
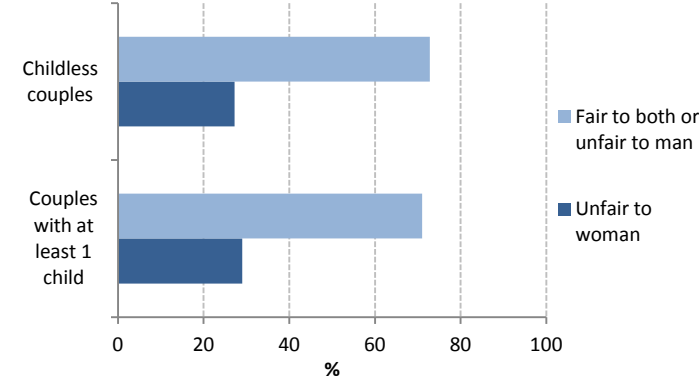


Figure 3: Perception of fairness of division of work within couples by parenthood status



*Multivariate results*

We estimated separate models for childless couples, parents with one child and parents with two and more children (Table 2). The four variables measuring the impact of division of work on childbearing are displayed first; the other control variables are included in the second part of the table. As anticipated, the impact of the division of paid and unpaid work on fertility differs by the number of children. We find no effect of employment arrangement or fairness perception for childless couples. Only the division of housework seems to be important for those couples: if the

woman already does most part of the housework, the likelihood of getting a first child is 30% higher than in arrangements where men and women share tasks equally.

Table 2: Results from discrete-time logistic regression model, odds ratios, Dependent variable: transition to first, second or higher order birth

	First birth	Second birth	Third + birth
<b>Couples employment arrangement</b>			
Both full-time employed	1	1	1
M full/W part-time or marginal	0.96	0.82	1.03
M full/W in parental leave	-	1.76 **	2.50 ***
M full/W not employed	0.82	1.18	1.67 *
Other constellations	0.88	1.96 ***	2.49 ***
<b>Division of housework</b>			
Housework: about 50/50 or man	1	1	1
Housework: mostly the woman	1.30 **	1.23	1.05
<b>Division of child care</b>			
Child care: about 50/50 or man	1	1	1
Child care: mostly the woman	-	1.28	0.94
<b>Perception of fairness of division of work</b>			
Fair to woman	1	1	1
Unfair to woman	1.03	0.73 **	0.82
<b>Duration since age 14</b>	0.91 *	-	-
<b>Duration since birth of previous child</b>	-	1.25 ***	1.33 ***
<b>Duration of cohabitation</b>	1.17 ***	1.17 ***	1.09 ***
<b>Gender</b>			
Male	1	1	1
Female	0.97	0.74 **	0.61 ***
<b>Region of Germany</b>			
East Germany	1	1	1
West Germany	0.59 ***	1.29	1.29
<b>Highest qualification</b>			
Both vocational degree	1	1	1
Both no vocational or university degree	0.59	0.69	1.24
Both university degree	1.33 *	3.21 **	1.85 ***
She lower than him	0.90	1.40	1.23
He lower than her	0.80	1.70 ***	1.15
<b>Number of siblings</b>			
No siblings	0.92	0.88	1.04
One sibling	1	1	1
Two siblings	1.24	1.04	1.07
Three and more siblings	1.47 *	1.05	1.44 *
<b>Cohort</b>			
1971-73	1	1	1
1981-83	1.99	3.30 ***	3.43 ***
<b>Marital status</b>			
Married	1	1	1
Cohabiting	0.55 ***	0.69 **	1.31
<b>Relationship satisfaction</b>			
	1.03	1.07 **	1.04
Constant	0.29	0.007 ***	0.003 ***
Pseudo R <sup>2</sup>	0.14	0.19	0.11
Persons/events	1700/391	1554/386	2586/230

Significance: p<=0.1 (\*), p <=0.05 (\*\*) & p <= 0.01 (\*\*\*). Source: Pairfam + DemoDiff – wave 1-4, controlled for missings.

Surprisingly, neither the actual division of housework nor the actual division of child care has a significant impact on continued childbearing. More important is the actual employment situation. In the traditional setting of Germany, we find lowest transition rates for parents that are both full-time employed. During parental leave, couples display the highest likelihood of becoming pregnant with another child. The perceived fairness of the division of paid and unpaid work is important to one-

child parents only. If they perceive their division of work as unfair to the woman, they display a 30% lower transition rate to a second child. What seems to be of high importance for all fertility decisions is accumulated human capital: academic couples make the transition to parenthood or to family enlargement more often than less qualified couples. To gain a better insight into the effect of qualification, we did an interaction between highest qualification and the perception of fairness of the division of work (Table 3).

Table 3: Interaction between highest qualification and perception of fairness of division of work, odds ratios, Dependent variable: transition to first, second or higher order birth

	First birth		Second birth		Third + birth	
	<i>Unfair to woman</i>	<i>Fair to woman</i>	<i>Unfair to woman</i>	<i>Fair to woman</i>	<i>Unfair to woman</i>	<i>Fair to woman</i>
Both without any degree	1.09	0.34 **	0.19 ***	0.17 ***	0.67	0.58
Both vocational degree	0.82	0.9	0.22 ***	0.27 ***	0.47 ***	0.46 ***
Both university degree	1.79 *	<b>1</b>	0.45 *	<b>1</b>	0.43 (*)	<b>1</b>
Man has higher qualification	0.59	0.86	0.31 ***	0.38 ***	0.43 **	0.62 *
Woman has higher qualification	0.66	0.73	0.33 ***	0.48 ***	0.50 *	0.53 *

Significance:  $p < 0.1$  (\*),  $p < 0.05$  (\*\*) &  $p < 0.01$  (\*\*\*). Source: Pairfam + DemoDiff – wave 1-4, controlled for missing.

Since the main effect has been detected for academic couples, we set the reference category to couples with both a university degree who considered their division of paid and unpaid work as fair. Academic couples, who already have children and perceive their division of work as fair, display highest transition rates of subsequent childbearing compared to all other combinations. If they are still childless, perceiving the share of work as fair does not increase the likelihood of getting a first birth. Quite the contrary: they are less likely to enter parenthood compared to academic couples with an unfair perception of division of work. One could argue that they either might have a lower family orientation or they might anticipate that their norms of equity are not easily to sustain after family formation. In the institutional settings of a rather conservative welfare state such as Germany, especially highly educated women might anticipate that they are likely to give up this equality when becoming parent and try to combine employment and child care. Academic couples who already entered parenthood and have maintained a sense of fairness display highest odds ratios of having another child. They either have more resources to keep up a fair division of unpaid family work and employment or they are more selective than other groups. Considering the high share of childlessness especially among women with a university degree in Germany (Statistisches Bundesamt 2013), the threshold of becoming parents is highest for academic couples. Those who decided to have children are likely to be more family-oriented than other couples.

## DISCUSSION

Our preliminary results support the idea that couples employment situation and the general perception of fairness regarding the division of paid and unpaid work are important for fertility decisions. However, the number of previous children is decisive.

A less-equal division of household labor makes it more likely to make the *transition to parenthood*. Couples with more traditional roles are more family-prone and therefore more likely to select themselves into parenthood. The perceived fairness of the division of work is important to *one-child parents* only. They most recently experienced the shift towards more traditional arrangements after the birth of their first child and those who perceive the loss of equity the strongest, will not continue with family enlargement.

The most decisive determinant for *higher-order childbearing* is the non-employment of the woman. Considering the benefit in tax reductions, the co-insurance of non-employed married wives in the social security system and the still scarce availability of comprehensive all-day child care in Germany, the most traditional employment arrangement is still the one in which most of higher-order childbearing occurs.

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