## Can policy trump gender? The impact of parenthood upon paid and unpaid work and the gender division of labor in five countries

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#### **INTRODUCTION**

Research associates the transition to parenthood with higher daily workloads for fathers and mothers compared to childless men and women, and with intensification of the gender division of labour (Craig 2007). We explore whether and how these outcomes vary in different countries, since they may now be less marked in some settings (Dribe & Stanfors 2009). Policies seeking to reconcile work and family commitments vary widely cross nationally and may have an impact upon the allocation of time within households (Anxo et al. 2007b). An understanding of where the responsibility falls for providing the time resources needed to raise children is crucial to knowing how readily families are able to share the time costs of care with the state or private substitute carers, and also to understanding gender inequality (Daly & Rake 2003). We compare how becoming a mother or a father impacts on time in paid work, domestic work, and childcare in five countries (USA, Australia, Italy, France, and Denmark) with different workplace systems, family and social policies and cultural attitudes to family care provision.

## BACKGROUND

Children require a great deal of time to be devoted to their care, as well as money devoted to their support. They can also create the need for more housework to be done, adding to a family's need for laundry, cleaning and tidying up (Craig 2006a). Finding time for housework and family care has become challenging as women have moved into the paid work force. Domestic work is not being taken up by men at the same rate as women have taken up market work (Bianchi et al. 2006). Much of the literature on the persistence of the gender division of care and other unpaid work focuses on three possible causes: limited male time availability, unequal relative resources, and conforming to gender ideology (Brines 1994, Coltrane 2000, Greenstein 2000). It is also now recognised that beyond individual and household micro-level factors, the demands of work and family, and options for meeting them, are strongly influenced by macro-level factors, including social, family and workplace policies (Fuwa 2004, Hook 2006).

Social policies can facilitate or hinder combining work and family, including exacerbating or ameliorating gender differences in workforce participation (Gornick & Meyers 2004). Since the responsibility for care usually reverts to women if no supports are provided, the extent to which women's paid work is facilitated by policy

measures also affects couples' options on how to divide between themselves responsibility for employment and family care (Lewis 2006). That is, measures such as access to childcare or parental leaves affect the way households can manage and apportion the extra time demands associated with having children. Of course, specific policy measures do not exist in isolation. Which measures are adopted and what effect they have on individual and household behaviour varies from country to country, arising from a complex mixture of values, culture, structure, institutions and preferences (Pfau-Effinger 2000). In combination, these factors influence the extent to which families (can) share the time costs of children with the state or the market, and also how the time costs of children are distributed between men and women within the family.

Although the specific combination of policy measures will not be exactly the same, countries can be broadly grouped on the basis of policy frameworks and the cultural background that informs them. There is a substantial body of work on the categorisation of welfare states in relation to market work, and more recently, scholars have begun to group countries according to how care is valued, defined and allocated (Daly & Rake 2003). For example, Linda Hass (2003) identifies four care models: market-oriented (Anglo countries, including the USA and Australia) privatized or 'non-interventionist' (exemplified by Italy, Greece, Portugal, and Spain), family-centered (including France, Germany), and 'valued-care' (exemplified by Denmark, Sweden, and Finland). However, no country fits a heuristic model perfectly, and while the five countries we have chosen for analysis fit broadly within this schema, each is also unique. We now briefly outline the cultural and policy context in relation to work and family issues in the USA, Australia, Italy, France and Denmark.

## Outline of social and policy context

The USA most typically exemplifies a market-oriented care model in which work-family balance and the raising of children are regarded as private matters outside the responsibility of the state (Haas 2003). Traditional values concerning the role of women and importance of mothering were historically widespread, and for most of the last century US middle-class families with children typically had a male breadwinner and a female homemaker. However, the work force participation of mothers has risen to be quite high by world standards. In 2000, 75% of mothers with one child in the USA were employed, with only 15% working part time (OECD 2002b). Social change for US women has arisen more from claims to be breadwinners in their own right (supported by individual rights such as tax credits for childcare, equal opportunity legislation and affirmative action) than from claims to universal supports or public services for child-raising (Berggren 2003; O'Connor et al. 1999). The USA is one of only two OECD countries (the other is Australia) with no mandated paid maternity leave (Moss & Deven 2006). Parental care substitutes are be found through market-based childcare, but quality varies and costs can be high (Orloff 1996).

Australia is also regarded as falling within the market-oriented care model, although less neatly than the USA (Haas 2003). Like the USA, Australia has no national paid maternity leave system. Parents who have worked continuously for their employer for a year have statutory access to twelve months unpaid leave, but only gain access to paid leaves by industrial award, enterprise bargaining, or individual agreement (Baird et al. 2002). Australia is also similar to the USA in that most formal childcare is provided through the market, but differs in that services are highly regulated and therefore have historically been of good quality (Brennan 2007). It is, however, costly, and many families rely on informal care, most usually provided by grandparents (Doiron and Kalb2005). Tax transfers to families with dependent children are generous and favour the single income couple family (Cass and Brennan 2003; McDonald 2000). A high rhetorical value is placed on maternal care of children, and although mothers' workforce participation has grown over the last half-century, it is still low compared to other Anglo countries, with a high proportion working part time (Campbell & Charlesworth 2004, OECD 2006).

The Italian state has limited involvement in encouraging maternal labor force participation or in providing or facilitating support for working parents, and its care model is classified by Haas as 'non-interventionist' (Haas 2003). The (predominantly private) nurseries charge high fees, there are few childcare places for under-three year olds, and daily hours are limited. So for women working fulltime, non-family childcare is not a ready option (OECD 2003). Only six per cent of children under the age of three are in childcare, which means that although maternity leave of 20 weeks is compulsory, after that time mothers either withdraw from the paid work force or rely on extended family for childcare assistance (Miller 2004). There are few opportunities for part time work. Thus Italy's family policies neither facilitate women's workforce participation, nor generously subsidise home care, which means it there is very heavy reliance on family resources (Hantrais and Ackers 2005). Italy (along with Spain and Greece) has the lowest female labor force participation in the European Union (OECD 2006). Also in common with those countries, fertility rates are very low.

In contrast to the USA, Australia and Italy, in France state intervention in family affairs is socially legitimized, and the raising of children is regarded as a shared social responsibility (Barbier & Theret 2000). The government provides a range of supports to women who seek to balance work and care, which means they have considerable choice about how to do so (Morgan 2003). However, it is important to note that French policy has not been informed by an explicit ideology in support of gender equity: the more consistent aim has been to boost the fertility rate, so some supports become more generous the more children a family has (Bettio and Plantenga 2004). There is 16 weeks paid maternity leave for the birth of each of the first two children, paid at 100 per cent of earnings (to a ceiling) and 26 weeks for third and subsequent children (Fagnani and Danielle 2007). Generously means-tested family payments are made to all families with more than one child until the child reaches the age of three. For one-child families, the payment is made until six months after maternity leave expires (Fagnani and Danielle 2007). French childcare is a dual system of private care for children under three, and universal publicly-funded preschool for 3-5-year-olds. The assumption is that early care will occur at home or parents will make private substitute arrangements, but that over the age of three, care is a state responsibility. This combination of policies allows mothers support to work if they choose, without explicitly aiming to increase father's involvement in care (Bettio & Plantenga 2001).

The only country we examine that specifically aims to promote gender equity in family care provision is Denmark. Denmark fits within the valued-care model, which Haas defines as where both mothers and fathers are responsible for childcare and both government and employers are responsible for assisting (Haas 2003). So in Denmark both gender equity and the idea that children are a shared social responsibility are integrated into social policy (James 2002). On equal opportunity legislation, Denmark ranks first with Sweden on the gender equity scale. Denmark treats child care as a social right and publically subsidized childcare is universally available (Never 2006). The policy orientation differs according to age, in that it supports parental care in the first 6-12 months of a child's life and then shifts to a guarantee of public child care after age one, including comprehensive after-school care for children of school age. In 2002 94% of children aged 3-5 were enrolled in public day-care (Koopmans & Schoippers 2003). State-funded parental leave to care for a new-born in Denmark is 28 weeks, which can be topped up by employers (Eydal 2005). Most mothers return to full time employment after the leave period and the labour force participation of Danish mothers is high. Parents have the right to work part time until children are aged eight. However, most work full time, with usual hours (35 hours a week) low by world standards (Anxo et al. 2007a). Leave specifically earmarked for fathers was instituted in the 1990s, but was discontinued on the grounds that increased benefit payments (to equivalence with maternity leave payment throughout, when before half the period of parental leave was paid at 60 percent of maternity leave benefit) should induce more fathers to take up the genderneutral entitlement (Moss & Deven 2006).

In very broad summary, in the USA and Australia it is expected that the family will care for children or find market substitutes, and in Italy it is expected that families will provide the care. France provides supports for women to share care with the state, and Denmark provides both state supports and rhetorically encourages fathers to be involved alongside mothers. Our research question is: what difference does being in one or other of these policy and cultural environments make to the time impacts of the transition to parenthood, and how it is divided between mothers and fathers?

#### METHOD

#### Data

We use data from the Australian Time Use Survey 2006 (AUSTUS), the American Time Use Survey 2003 (ATUS), the Danish Time Use Survey 2002 (DTUS), the Italian Time Use Survey 2002-03 (ITUS), and the French Time Use Survey 1999 (FTUS). Each of these surveys contains nationally representative samples of the respective populations of each country. All surveys except the ATUS collected time use information using a time-budget diary instrument completed by respondents. The ATUS was administered via telephone interviews. Both these methods are regarded as providing reliable estimates of time use (Juster 1985, Robinson 1985). All surveys collect information from weekdays and weekend days. We concentrate on time use data collected on weekdays because the need to balance work and family is most pronounced on a weekday. In all surveys except ATUS, multiple members of the sampled households were required to provide time use data. We are thus able to analyze men and women living together as couples in households enabling us to derive individual and household level results simultaneously.

#### **Dependent** Variables

We use information about individuals' primary activities to compute measures of paid work, domestic work, and childcare<sup>1</sup> in all five countries. Denmark, Italy and France all use the Harmonised European Time Use Survey (HETUS) activity coding framework (EUROSTAT 2004). This means that harmonizing measures of time use in each of these countries is very straightforward. The coding frameworks used in ATUS and AUSTUS are somewhat more detailed, but the broad activity groups that are analysed in this paper are comparable across all five surveys.

*Paid work* includes time spent in a main and a second job including breaks; and it includes any other or unspecified activities associated with employment. *Domestic work* (a term we use interchangeably with housework) includes cooking, cleaning, laundry, gardening and pet care, repairs and DIY, shopping, household management, caring for adults in the household, travel associated with domestic work, and other unspecified activities associated with domestic work. *Childcare* includes physical care and supervisory childcare, teaching a child, reading playing and talking with a child, accompanying a child and travel associated with children, and other or unspecified activities associated with the care of children To capture the whole effect of children upon both paid and unpaid workload, we compute a composite measure of *total work*, which is the sum of paid work, domestic work and childcare. All measures are computed as minutes per weekday and then transformed into hours per weekday.

#### Analysis Plan and Independent Variables

Our analysis proceeds in two parts. First, we examine the family work gap, or what could be called the *time cost of children*. This is the difference that having a child makes to the paid work, domestic work, and childcare, which summed gives a measure of total work, of mothers and fathers compared with women and men who do not have children. To establish the time cost of children in each of the five countries we estimate OLS regressions on each of these measures of work. Our key independent variables of interest are *country*, and *interactions between country* and a variable indicating the *presence of a young child aged 0–4 years* (yes=1). The model is specified such that the estimated parameters of the interaction terms refer to the differences in hours per weekday in each type of work for parents compared with non-parents in each country. We carry out post regression tests to ascertain if the estimated interaction parameters are significantly different across countries, and thereby to judge if the impact of children on parental time varies cross-nationally. Significance

<sup>&</sup>lt;sup>1</sup> Time during which parents are doing something else as a main activity (simultaneous or secondary activity) whilst supervising or talking to children is not counted in these analyses because it would impair the comparison with France. However, we acknowledge that childcare performed as a secondary activity is a large and important component of care (see for example Craig, Lyn, and Michael Bittman. 2008. "The Effect of Children on Adults' Time-Use: An analysis of the incremental time costs of children in Australia." *Feminist Economics* 14(2):57-85.) and we incorporate it in later detailed analyses of parents' time use which build upon this research.

levels for these tests are reported in parentheses throughout the text in the results section. We examine the total time impact of a child in each country, and differences in this impact cross-nationally. To concentrate on the impact of a child on each parent, we estimate models for men and women separately. We therefore estimate a total of eight models in this section of the analysis. Full results for these models are contained in Table 2.

Second, we examine the gender division of labor in households with and without children in each of the five countries. Again, we estimate OLS regressions on paid work, domestic work, childcare and the aggregate measure total work. The key variables of interest here are *country*, and *interactions between country* and a variable indicating if the *respondent is female* (yes=1). The model is specified such that the estimated parameters of the interactions refer to the differences in hours per weekday in each type of work for women compared with men in each country. We test differences between these estimated interaction parameters so as to examine crossnational variation in the gender division of labor. Again, significance levels for these tests will be reported in parentheses throughout the text in the results section. Thus we can assess the overall differences between men and women in each country, and cross-national variation in these differences. To focus on the gender differences in each household, we estimate models for those with and without children separately. Time spent on childcare in households without a child is aggregated with time spent on domestic work. We therefore estimate a total of seven models. Results for these models are contained in Table 3.

*Control Variables.* All models in each section contain an identical set of control variables. They control for the *education* of each partner in the couple household. Higher education has been found to predict more time allocation to both paid work and childcare (Craig 2006b, Sayer et al. 2004). We focus on those with a degree or higher qualification and we construct a categorical variable with four categories: (1) no partner has a degree (omitted); (2) both partners have a degree; (3) the man has a degree; and (4) the woman has a degree. The models also control for the *age* of the respondents. All individuals are grouped into one of two categories: (1) aged 20 - 34 (omitted); or (2) aged 35 and over. Finally, a variable indicating the *presence of other adults* in the household (excluding each partner) is included in the regression models (yes = 1). In households with children, these other adults may include older children (aged 20 and over), but this is not the case in households without children. We include this control because other adults may provide additional household help in unpaid work and care (Kendig & Bianchi 2008).

We draw a sample of couples with at least one young child (0 - 4 years) and couples of child bearing age without children. We restrict the age of the women in the sample to 20 - 44 years, and the age of the men in the sample to 20 - 54 years. From ATUS we draw a sample of individual men and women who are married or cohabiting and who have at least one young child (0 - 4 years), or those who are of child-bearing age but without children. In order to make these individuals comparable to those selected in the other countries, we only select men aged 20 - 55 years who are partnered with women aged 20 - 44 years and vice versa. These restrictions result in a sample of 5374 observations, but missing values for education reduces the total number of observations to 5337. Table 1 presents information relating to the observations in each country.

## [Table 1 about here]

By construction, the number of men and women in each country is equal as they come from the same household, with the exception of the USA. There are more men than women in the USA due to the broader age range for men. This difference could reasonably be expected to be even larger, but is it not due to a higher response rate for women than men overall in the ATUS (2003).

## RESULTS

### The time cost of children

*Total work* The total work of parents is significantly larger than the total work of non-parents in each country, and this applies to both mothers and fathers (see Table 2 columns 1 and 5). Summing the effects for men and women, we can compute the increase in the total household work in all countries except the USA. In Australia, households with children work 4.3 hours more per weekday than households without children. The extra workloads associated with parenthood are much less in the European countries, ranging from 2 to 2.6 hours. If we were to assume that the men and women in the USA were living in the same household, the total work in households with children would be 3.4 hours. This figure falls between the totals for European countries and Australia. So in no country is the effect upon households of having children time-neutral, but the time cost is highest in the Anglo, or market-oriented care countries.

## [Table 2 about here]

Our models show how this extra labour differentially affects men and women in each country. In all countries except Denmark, mothers carry out the larger share of the increased workloads. In Australia and Italy, mothers' additional workloads are almost twice as large as fathers. (Recall, however, that the overall differences in total work between having and not having a child are much greater in Australia than in Italy.) In France and USA the gender differences are not nearly as pronounced, and in Denmark the additional workload is shared equally between mothers and fathers. Amongst fathers, the extra work time is lowest in Italy (0.7 hours) and highest in the Australia and USA (1.5 hours) and the difference in the effects between these countries is significant (P < .05). In all other countries the extra workload for fathers compared with childless men is quite similar, ranging from 1.2 to 1.3 hours. The extra workload of mothers compared with childless women is significantly greater in Australia (2.8 hours) than in all other countries. In all other countries the increased maternal workload ranges from 1.3 to 1.9 hours, and there are no significant differences between these countries. Australian mothers, therefore, are quite distinct with respect to their added workloads. That is, of our sample countries, the difference between having a child and not in terms of total workload is most pronounced for Australian women.

To find out which types of activity are affected, we turn now to the components of total work.

*Childcare* Unsurprisingly, the increased workload of parents is concentrated in time performing childcare (see Table 2 columns 4 and 8). All parents in all the countries perform a very significantly greater amount of childcare than non-parents, as is to be expected. There are cross national differences in amount, however. French and Italian fathers average 0.8 and 1 hour daily childcare respectively. Fathers in Australia and the USA both average 1.3 hours childcare and fathers in Denmark average 1.5 hours childcare. There is no significant difference between fathers in these three latter countries. In all the countries, mothers average more time performing childcare than fathers. Australian mothers devote significantly more time to childcare than mothers in any other country (4.1 hours). Mothers in Denmark, Italy and the USA perform similar amounts to each other, ranging from 3.1 to 3.5 hours. Mothers in France, like French fathers, perform the lowest amount (2.7 hours), which is significantly lower than mothers in Australia and the USA.

*Domestic work* The presence of children has a negative impact on men's domestic work in Denmark, Italy and the USA (see Table 2 column 3). This suggests that when men in these countries become fathers they find some of the time they spend performing childcare by lowering the time they devote to housework. There is no fatherhood effect, positive or negative, upon the domestic labour time of men in Australia or France. Mothers in Australia, Italy and the USA perform significantly more housework than their compatriots without children. The effect is largest in Australia and is significantly different from the effect in either Italy or the USA (P < .001). In Denmark and France, mothers do no more (or less) housework than women without children, so the effect of parenthood upon the composition of their unpaid work is more similar to that upon men (negative or null) than upon women in Australia, USA and Italy.

Paid work The paid work of fathers is not significantly different from the paid work of men without children, except in the USA (where fathers are predicted to do 0.6 of an hour more paid work than childless men, see Table 2 column 2). In contrast, in all the countries without exception the paid work of mothers is significantly less than the paid work of women without children (see Table 2 column 6). The amount is by which paid work is reduced is lowest in France (1.2 hours) and Denmark (1.6 hours), and there is no significant difference between these countries. The negative impact of children on the paid work of mothers is larger in the USA (2 hours), Italy (2.7 hours), and Australia (3.4 hours). The amount in Australia is significantly different from the impact in all other countries, with the exception of Italy. The negative impact of children upon paid work for women in Italy is also very large, but, statistically at least, it is guite similar to that for mothers in the USA and Australia, and different from those in France (P < .01) and Denmark (P = .05). So while mothers in all countries do less paid work than childless women, the difference is less marked in Denmark and France, where supports for maternal workforce participation are most extensive, than in the other three countries.

The results of this first set of models show that parents in all countries spend more time in total work than non-parents, and suggest that this overall time cost is disproportionately borne by women, except in Denmark. Moreover, for mothers in all countries there is a clear shift from paid to unpaid work suggesting a more pronounced gendered division of labour. Our second set of models examines the work gender gap, and how it differs in households with and without children, directly.

#### The gender division of labor

If men and women did equal amounts of paid and unpaid work, then the differences between them would be zero. In our models, the extent to which the difference deviates from zero indicates the extent to which the division of labor is unequal. As the models are specified (see above) a negative coefficient signifies that women do less than men and a positive coefficient signifies that women do more than men. The total work of men and women in households without a child (see Table 3 column 1) is equal with the exception of Australia, where women's total work is less than men's total work (1.2 hours). In households with children (see Table 3 column 4), mothers and fathers total work is equal with the exception of Italy where mothers' total work is significantly greater than fathers' total work (0.6 hours). Widespread differences emerge, however, when looking at the components of paid and unpaid work.

# [Table 3 about here]

*Childcare* The gender division of childcare is only relevant in households with children (see Table 3 column 7). Without exception, mothers spend significantly more time performing childcare than men. The gap is largest in Australia (2.8 hours) and smallest in Denmark (1.5 hours). The large gap in Australia is significantly different from all other countries (P < .01). The gaps in Denmark and France are not significantly different, and this applies also to the gap between the USA and France.

*Domestic work* In households without children, women do more domestic work than men in all the countries with the single exception of Denmark (see Table 3 column 3). That is, amongst childless households, Denmark is the only country with an equal division of housework. Women in childless households in Italy perform 2.6 hours more domestic work than men. This gender discrepancy in domestic work is significantly higher than in all other countries, which range from 0.6 to 1.7 hours. In households *with* children, mothers do more domestic work than fathers in all the countries without exception (see Table 3 column 6). The gender division of domestic work in households with children is lowest in Denmark (0.8 hours), and this is significantly different from all the other countries (P < .001). It is highest in Italy (3.9 hours), which is also significantly different from all other countries (P < .001). The gender division of unpaid work in Australia in households with children is significantly higher than in the USA or France. In households with children the gender division of unpaid labor is similar in these latter two countries.

*Paid work* In all the countries, women do less paid work than men. Further, in all the countries, in households with children the differences in paid work are much larger than in childless households (see Table 3 columns 2 and 5). The gap is smallest in Denmark, where in households without children women do 1.1 hours less paid work than men, and in households with children they do 2.8 hours less paid work than men. In households without children there is no significant difference between Danish women and women in the other countries with the exception of Italy (where women

do 2.7 hours less paid work than men). In households with children, however, significant cross-national variation in the gender division of paid work is apparent. The division is greatest in Australia and Italy, followed by the USA, and least in France and Denmark. The difference in the effects for women in Australia, Italy and the USA compared with men in these countries are all significantly different from those in Denmark (P < .01). In particular, in households with children the division of paid work in Denmark and France is significantly less than it is in Australia and Italy. The division of paid work in the USA is significantly lower than in Australia and Italy, significantly greater than in Denmark, and comparable to France.

# DISCUSSION AND CONCLUSION

These results confirm that in all the countries households with children have both a higher total workload and a more extreme gender division of labor than households without children. However, there are notable differences in the amount and composition of workload changes, which are consistent with the prevalent family and social policies, workplace systems, and cultural attitudes to family care provision of each of the countries.

First is the way they differentially affect men and women. In all the countries the added unpaid work time associated with motherhood is higher than the added unpaid work time associated with fatherhood, and in all countries women's (unlike men's) paid work time is lower if they have children. However, there are striking cross national differences in the magnitude of these effects. The paid work gap between childless women and mothers in the market-oriented care countries of USA and Australia and in the non-interventionist care country of Italy is much more pronounced than it is in Denmark or France. Also, mothers in Australia, Italy and the USA perform significantly more domestic work than women in these same countries without a child. In Denmark and France mothers, like fathers, perform no more housework than their childless compatriots. Their behaviour is more like the male norm, and women in these countries experience the least time impacts of motherhood.

However, there are also differences between the time impact of parenthood in France and Denmark. French men do the least childcare of all the men we studied, so post-parenthood a total work gender gap pertains in France despite the null impact on domestic labour and the relatively moderate effect on paid work for French mothers. In contrast, in Denmark the increase in total household work (though differently composed) is split almost equally between mothers and fathers, and men's childcare is closest in amount to women's. There are thus higher family childcare totals in Denmark than France. These findings are consistent with what might be expected from the policy profile and cultural attitudes of France and Denmark. In the former, relatively extensive institutional supports for working mothers are in place, but little involvement is expected from fathers. In the latter, there are both institutional supports for women to work, and encouragement for fathers to be involved in care. So while the French system lightens the maternal workload, of the countries we examine, it is Denmark which distributes the time cost of children most evenly between the state, women and men.

Also notable is that it is in the USA and Australia that parenthood makes the most difference to how women divide their time between paid and unpaid work. If we were to rank the countries on the gender division of labor (most equitable first) in childless households the order would be Denmark, USA, Australia, France, Italy. For households with children, the order would be Denmark, France, USA, Italy, Australia. Thus in Italy, where in objective terms women do much more unpaid work than men, parenthood actually improves their relative position. The effect of motherhood is muted by an already very powerful effect of gender. France's relative position also improves, and Denmark ranks as most equitable for both types of household. In the USA and Australia, motherhood compounds the effects of gender. The presence of children lowers the USA ranking from second to third, and takes Australia from being third most equitable to being least equitable of all. Thus Australia, where there is equal opportunity in education and paid work for men and women, but policies tend to reinforce traditional gender roles in families with children, stands out as a country where having children has a particularly negative impact on the gender division of labor.

In summary, parenthood brings more total work and a deeper gender division of labor in all the countries studied, but the effects are most pronounced in the Anglo countries, where children are regarded as private responsibility, family care is valorised, and there is gender-neutral opportunity in the public sphere but little public institutional support to balance work and family. It is in these countries that having children is associated with the strongest bifurcation of experience both between mothers and non-mothers, and between men and women. The time effects of parenthood are least pronounced in Denmark, both because Danish mothers do more paid work and less unpaid work than mothers in other countries, and also because Danish men do more childcare than men elsewhere in Europe. The policy implication is that to minimise the time cost of children and to promote gender equity, requires the state to share with families the responsibility for raising children, and to ensure that policy and rhetoric encourage both female workforce participation and father involvement in childcare.

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## APPENDIX

# Table 1:Sample characteristics

|                                   | Australia | Denmark | Italy | France | USA  | Total |
|-----------------------------------|-----------|---------|-------|--------|------|-------|
| Total number of observations      | 628       | 502     | 1610  | 1160   | 1437 | 5337  |
| Total number of households        | 314       | 251     | 805   | 580    | 1437 | 3387  |
| Men                               | 0.50      | 0.50    | 0.50  | 0.50   | 0.51 | 0.50  |
| Women                             | 0.50      | 0.50    | 0.50  | 0.50   | 0.49 | 0.50  |
| No Child                          | 0.34      | 0.40    | 0.26  | 0.23   | 0.30 | 0.29  |
| Youngest child 0 - 4 years        | 0.66      | 0.60    | 0.74  | 0.77   | 0.70 | 0.71  |
| No other adults in household      | 0.99      | 0.97    | 0.99  | 0.97   | 0.96 | 0.97  |
| Other adults present in household | 0.01      | 0.03    | 0.01  | 0.03   | 0.04 | 0.03  |
| No degree                         | 0.53      | 0.54    | 0.80  | 0.58   | 0.46 | 0.60  |
| Both degree                       | 0.19      | 0.23    | 0.06  | 0.22   | 0.31 | 0.19  |
| Man degree                        | 0.08      | 0.08    | 0.06  | 0.10   | 0.10 | 0.08  |
| Woman degree                      | 0.20      | 0.15    | 0.09  | 0.10   | 0.13 | 0.12  |
| 20 - 34 years                     | 0.64      | 0.58    | 0.43  | 0.61   | 0.51 | 0.53  |
| 35 years and over                 | 0.36      | 0.42    | 0.57  | 0.39   | 0.49 | 0.47  |

|                  | Men        |           |               |           | Women      |           |                      |           |  |
|------------------|------------|-----------|---------------|-----------|------------|-----------|----------------------|-----------|--|
|                  | Total work | Paid work | Domestic work | Childcare | Total work | Paid work | <b>Domestic work</b> | Childcare |  |
| Australia        | 0.6        | 1.6**     | -0.9***       | -0.0      | -0.1       | 0.3       | -0.3                 | -0.0      |  |
|                  | (0.4)      | (0.5)     | (0.3)         | (0.2)     | (0.4)      | (0.5)     | (0.3)                | (0.3)     |  |
| Italy            | 0.4        | 1.7***    | -1.4***       | 0.0       | 0.8*       | 0.2       | 0.6                  | 0.1       |  |
|                  | (0.4)      | (0.5)     | (0.2)         | (0.1)     | (0.3)      | (0.4)     | (0.3)                | (0.2)     |  |
| France           | -1.1**     | -0.7      | -0.4          | -0.0      | -0.7       | -1.5**    | 0.8**                | -0.0      |  |
|                  | (0.4)      | (0.5)     | (0.3)         | (0.1)     | (0.4)      | (0.5)     | (0.3)                | (0.2)     |  |
| USA              | 0.6        | 0.8       | -0.2          | -0.0      | 0.5        | 0.1       | 0.4                  | -0.0      |  |
|                  | (0.4)      | (0.4)     | (0.2)         | (0.1)     | (0.3)      | (0.4)     | (0.3)                | (0.2)     |  |
| Australia: Child | 1.5***     | -0.2      | 0.4           | 1.3***    | 2.8***     | -3.4***   | 2.1***               | 4.1***    |  |
|                  | (0.4)      | (0.5)     | (0.2)         | (0.1)     | (0.3)      | (0.4)     | (0.3)                | (0.2)     |  |
| Denmark: Child   | 1.3**      | 0.3       | -0.5*         | 1.5***    | 1.3***     | -1.6***   | -0.1                 | 3.1***    |  |
|                  | (0.4)      | (0.5)     | (0.2)         | (0.1)     | (0.4)      | (0.5)     | (0.3)                | (0.2)     |  |
| Italy: Child     | 0.7**      | -0.0      | -0.4*         | 1.0***    | 1.3***     | -2.7***   | 0.9***               | 3.1***    |  |
|                  | (0.2)      | (0.3)     | (0.2)         | (0.1)     | (0.2)      | (0.3)     | (0.2)                | (0.1)     |  |
| France: Child    | 1.2***     | 0.6       | -0.3          | 0.8***    | 1.5***     | -1.2***   | 0.1                  | 2.7***    |  |
|                  | (0.3)      | (0.4)     | (0.2)         | (0.1)     | (0.3)      | (0.4)     | (0.2)                | (0.2)     |  |
| USA: Child       | 1.5***     | 0.6*      | -0.4*         | 1.3***    | 1.9***     | -2.0***   | 0.4*                 | 3.5***    |  |
|                  | (0.2)      | (0.3)     | (0.2)         | (0.1)     | (0.2)      | (0.3)     | (0.2)                | (0.2)     |  |
| Both have degree | 0.4*       | 0.4*      | -0.2*         | 0.2**     | 0.3*       | 0.9***    | -0.8***              | 0.2*      |  |
| _                | (0.2)      | (0.2)     | (0.1)         | (0.1)     | (0.1)      | (0.2)     | (0.1)                | (0.1)     |  |
| Man has degree   | 0.1        | 0.1       | -0.1          | 0.1       | -0.1       | 0.0       | -0.3                 | 0.2       |  |
| -                | (0.2)      | (0.3)     | (0.1)         | (0.1)     | (0.2)      | (0.3)     | (0.2)                | (0.1)     |  |

 Table 2:
 OLS coefficients of hours per weekday in total work, paid work, domestic work and childcare for men and women

| Woman has degree       | 0.2    | -0.5*  | 0.4*** | 0.2** | 0.6*** | 1.0*** | -0.6*** | 0.2*  |
|------------------------|--------|--------|--------|-------|--------|--------|---------|-------|
|                        | (0.2)  | (0.2)  | (0.1)  | (0.1) | (0.2)  | (0.2)  | (0.1)   | (0.1) |
| aged 35 yrs and over   | 0.0    | -0.2   | 0.3*** | -0.0  | 0.3**  | 0.0    | 0.4***  | -0.1  |
|                        | (0.1)  | (0.1)  | (0.1)  | (0.0) | (0.1)  | (0.1)  | (0.1)   | (0.1) |
| Other adult present    | -1.1** | -1.3** | 0.2    | 0.0   | 0.6    | -0.0   | 0.5     | 0.1   |
|                        | (0.4)  | (0.5)  | (0.2)  | (0.1) | (0.3)  | (0.4)  | (0.3)   | (0.2) |
| Intercept              | 8.2*** | 6.1*** | 2.2*** | -0.1  | 7.6*** | 4.7*** | 2.9***  | -0.1  |
|                        | (0.3)  | (0.4)  | (0.2)  | (0.1) | (0.3)  | (0.4)  | (0.2)   | (0.2) |
| Number of observations | 2677   | 2677   | 2677   | 2677  | 2660   | 2660   | 2660    | 2660  |
| Adjusted R2            | 0.08   | 0.04   | 0.07   | 0.20  | 0.12   | 0.10   | 0.08    | 0.41  |

Table 3:OLS coefficients of hours per weekday in total work, paid work, domestic work for those without children, and total<br/>work, paid work, domestic work and childcare for those with children

|                  |            | No Child  |             | Child      |           |             |           |  |
|------------------|------------|-----------|-------------|------------|-----------|-------------|-----------|--|
|                  | Total work | Paid work | Unpaid work | Total work | Paid work | Unpaid work | Childcare |  |
| Australia        | 0.7        | 1.4**     | -0.8*       | 0.9**      | 1.2**     | -0.1        | -0.3      |  |
|                  | (0.4)      | (0.5)     | (0.3)       | (0.3)      | (0.4)     | (0.2)       | (0.2)     |  |
| Italy            | 0.5        | 1.9***    | -1.5***     | -0.2       | 1.5***    | -1.3***     | -0.4*     |  |
|                  | (0.4)      | (0.5)     | (0.3)       | (0.3)      | (0.3)     | (0.2)       | (0.2)     |  |
| France           | -1.1*      | -0.7      | -0.4        | -1.1***    | -0.2      | -0.2        | -0.7***   |  |
|                  | (0.4)      | (0.5)     | (0.3)       | (0.3)      | (0.3)     | (0.2)       | (0.2)     |  |
| USA              | 0.6        | 0.8       | -0.3        | 0.8**      | 1.2***    | -0.1        | -0.2      |  |
|                  | (0.4)      | (0.5)     | (0.3)       | (0.3)      | (0.3)     | (0.2)       | (0.2)     |  |
| Australia: Woman | -1.2**     | -2.2***   | 1.0**       | 0.2        | -5.5***   | 2.9***      | 2.8***    |  |

|                        | (0.4)  | (0.5)   | (0.3)  | (0.3)  | (0.4)   | (0.2)   | (0.2)  |
|------------------------|--------|---------|--------|--------|---------|---------|--------|
| Denmark: Woman         | -0.5   | -1.1*   | 0.6    | -0.4   | -2.8*** | 0.8***  | 1.5*** |
|                        | (0.4)  | (0.5)   | (0.3)  | (0.3)  | (0.4)   | (0.2)   | (0.2)  |
| Italy: Woman           | -0.1   | -2.7*** | 2.6*** | 0.6*** | -5.4*** | 3.9***  | 2.1*** |
|                        | (0.3)  | (0.4)   | (0.2)  | (0.2)  | (0.2)   | (0.1)   | (0.1)  |
| France: Woman          | -0.1   | -1.9*** | 1.7*** | 0.3    | -3.6*** | 2.1***  | 1.8*** |
|                        | (0.4)  | (0.5)   | (0.3)  | (0.2)  | (0.2)   | (0.1)   | (0.1)  |
| USA: Woman             | -0.5   | -1.7*** | 1.2*** | -0.2   | -4.2*** | 1.9***  | 2.2*** |
|                        | (0.3)  | (0.4)   | (0.2)  | (0.2)  | (0.2)   | (0.1)   | (0.1)  |
| Both have degree       | 0.5*   | 0.9***  | -0.4*  | 0.3*   | 0.5**   | -0.5*** | 0.3*** |
|                        | (0.2)  | (0.3)   | (0.2)  | (0.1)  | (0.2)   | (0.1)   | (0.1)  |
| Man has degree         | -0.1   | 0.1     | -0.2   | -0.0   | -0.0    | -0.2    | 0.2*   |
|                        | (0.3)  | (0.4)   | (0.2)  | (0.2)  | (0.2)   | (0.1)   | (0.1)  |
| Woman has degree       | 0.0    | 0.0     | 0.0    | 0.5*** | 0.4     | -0.1    | 0.3*** |
|                        | (0.2)  | (0.3)   | (0.2)  | (0.1)  | (0.2)   | (0.1)   | (0.1)  |
| aged 35 yrs and over   | 0.0    | -0.6**  | 0.6*** | 0.3**  | 0.1     | 0.3***  | -0.1   |
|                        | (0.2)  | (0.2)   | (0.1)  | (0.1)  | (0.1)   | (0.1)   | (0.1)  |
| Other adult present    | -0.1   | -0.9    | 0.7*   | -0.4   | -0.5    | 0.1     | 0.1    |
|                        | (0.4)  | (0.5)   | (0.3)  | (0.3)  | (0.4)   | (0.2)   | (0.2)  |
| Intercept              | 8.2*** | 6.1***  | 2.1*** | 9.3*** | 6.0***  | 1.9***  | 1.4*** |
|                        | (0.3)  | (0.4)   | (0.2)  | (0.2)  | (0.3)   | (0.2)   | (0.1)  |
| Number of observations | 1530   | 1530    | 1530   | 3807   | 3807    | 3807    | 3807   |
| Adjusted R2            | .032   | 0.10    | 0.14   | 0.07   | 0.29    | 0.30    | 0.28   |