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Cross-national patterns in individual and household employment and work hours by gender and parenthood

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# Luxembourg Income Study Working Paper Series

Working Paper No. 544

Cross-National Patterns in Individual and Household Employment and Work Hours by Gender and Parenthood

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# Cross-National Patterns in Individual and Household Employment and Work Hours by Gender and Parenthood

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# Cross-National Patterns in Individual and Household Employment and Work Hours by Gender and Parenthood

There is remarkable variation in employment rates cross-nationally, particularly for women and even more so for mothers. Yet, one challenge in this literature is the significant variability in how employment is conceptualized and studied. Analyses of employment rates often miss the substantial differences between women's overall employment rates and women's full-time employment rates. In addition, this literature has not completely recognized that parenthood has become a crucial axis of difference: childless men and women have much more comparable patterns of employment, although this varies somewhat across countries. Moreover, the literature that explores women's work hours often fails to make the connections to variation in their partners' employment hours and to total household hours. While men are very likely to be working full-time in every context, men's average weekly hours vary across countries, as do the total hours worked by households. Past theorizing and research has not fully recognized the implications of these differences by gender, parenthood, and total household employment hours

In this paper, we distinguish between overall employment rates and full-time employment rates among men and women, and examine total household employment hours for heterosexually partnered men and women, as well as women's share in total household employment hours, to investigate how *gender*, *parenthood*, *and partner's employment* are related to individual's employment patterns. We wish to complicate narratives based on employment rates, to emphasize the considerable variability in hours of employment for both men and women, as parents and childless people, and as members of the same household (Jacobs and Gerson 2004). We attempt to develop a more accurate account of how employment hours vary by parenthood

and gender, cross-nationally, and the implications of these variations for work-family conflict and for gender equity. By doing so, we hope to provide clearer conceptual maps of how employment varies cross-nationally, in order to provide scholars, advocates, and policymakers a greater comprehension of how to create policy contexts in which women and men are able to make real choices regarding care and employment.

We make three main arguments in this paper. First, gender is less salient than gendered parenthood in explaining differences in men's and women's employment rates. In the vast majority of countries, childless men's and women's employment rates and hours of employment are much more similar to one another than childless women's and mothers' employment patterns. Therefore, an important axis of difference with regard to employment is gendered parenthood. Secondly, when considering mothers' employment cross-nationally, it is important to consider both employment rates and average weekly hours of employment, in order to take into account how mothers' experiences vary cross-nationally both in terms of whether they are able to remain in the labor market, and, for those who remain, how many hours they work. Thirdly, we show that childless couples employment hours are relatively similar across countries, while coupled mothers' and fathers' employment hours vary more cross-nationally – suggesting that different policy contexts are particularly important for explaining cross-nationally variations in parents' employment patterns. In heterosexual coupled households with children, decisions about mothers' and fathers' time allocations to paid labor are usually jointly made, so we need to incorporate partner's employment and earnings into our understandings/analyses of coupled mothers' employment patterns. We use these three arguments to develop our own models of work-time regimes for heterosexually partnered households that balance gender equity in the division of employment hours against total household hours, and illustrate the major crossnational differences in how men's and women's employment patterns are related.

#### **Theoretical Context**

Over the last several decades, women's growing employment has profoundly changed both the economy and society with women's integration into the labor markets (OECD 2002b; Bianchi, Robinson, and Milkie 2006; van der Lippe and van Dijk 2002; Pettit and Hook 2009;). Although women's employment outside the home has changed remarkably, men's participation in carework – while increasing – has not undergone the same remarkably high rate of change. Since care demands do not simply evaporate when women enter employment, there remain a variety of questions about the factors that shape women's employment, as well as the factors that influence men's employment.

Much theorizing of women's employment tends to assume that men's employment hours are fixed: men work full-time, while women's hours are more variable, especially for mothers. Yet, both within countries, and across countries, men's and women's employment hours vary, and these variations lead to different outcomes, both in terms of work-life conflict and gender equity. Similarly, a great deal of the empirical work on women's employment examines women's employment patterns without connecting these patterns to their partner's employment patterns. By focusing some of our analyses on heterosexually coupled households, we recognize that men's and women's employment hours are linked, while noting that *how* they co-vary may differ based on the context. At base, we believe that women and men should have choices regarding caregiving and employment, but choices and preferences must be understood as constrained based on the resources and opportunities available to women, men, and their families (Lewis 2009). What factors affect women's and men's choices regarding employment? We

describe cross-national trends, in order to better understand how men's and women's employment time is connected.

# Patterns of Employment

There has been a remarkable narrowing of the gap between men's and women's employment rates (Rubery et al. 1999; OECD 2002b; Tranby 2008). Yet, there remains substantial variation across countries in women's employment rates (van der Lippe and van Dijk 2002; Pfau-Effinger 2004; Kremer 2005; Bianchi et al. 2006; Kenworthy 2008). Mothers' employment rates remain considerably lower than childless women's employment rates, while fathers' employment rates are almost always higher than for childless men, exacerbating gender gaps (OECD 2002b; Pettit and Hook 2009). Employment is particularly low for mothers of young children (van der Lippe and van Dijk 2002; Pettit and Hook 2009). At the same time, patterns around employment during childbearing years differ remarkably cross-nationally (Stier, Lewin-Epstein, and Braun 2001). In some countries, mothers retreat from the labor force permanently; in others, they retreat only when children are young. In others, mothers do not retreat at all, either because employment and childbearing are combined, or because few women enter the labor market (Stier et al., OECD 2002b).

Looking across a number of contexts as well as over time, Rubery et al. (1999, p. 87) argue that "motherhood disrupts women's activity levels less now than in the past." England (2006, p. 248, Table 8.1), focusing on the United States, similarly shows a remarkable growth in mothers' employment over time, including a jump from 38% in 1978 to 58% in 1998 of women with children under six employed. Although mothers remain less likely to be employed than childless women, the *growth* in mothers' employment is remarkable (England 2006; Tranby 2008; Lewis 2009). In addition, mothers are more continuously attached to the workforce, with

65 percent of American mothers returning to work within the first year of a child's life (Gangl and Ziefle 2009).

Yet although mothers' employment rates have increased, much of this is due to part-time employment. Women, particularly mothers, are more likely to be employed in part-time jobs (Rubery, Horrell, and Burchell 1994; Blossfeld and Hakim 1997; Rubery et al. 1999; Stier et al. 2001; Bardasi and Gornick 2008; Gornick and Heron 2006; Tranby 2008) while men are more likely than women to work in full-time employment and work longer than their contracted hours (Gardiner 2000). When mothers are employed, they are more likely to work part-time than either men (including fathers) or childless women (Gardiner 2000; Hook and Pettit 2009). In some countries, part-time employment strategies are viewed as short-term solutions when children are young, operating more as "a 'bridge' to full-time employment later in life than a 'trap' in marginal employment' (Stier et al. 2001, p. 1737). As Rubery et al. (1994, p. 206) persuasively argue, "most women hold both part-time and full-time employment during their working lives, and often switch more than once between the two states." Yet although part-time employment is clearly associated with higher overall women's employment, part-time employment may also operate to decrease women's career mobility (Pettit and Hook 2009).

In addition, it is important to analyze employment hours, as these hours vary across countries, and among groups within countries. Furthermore, it is crucial to understand how men's and women's hours are related to one another, and how employment decisions for full-time, part-time, and stepping out of the labor market are interconnected. For example, on average, Swedish fathers spend approximately 40.5 hours working each week; American fathers spend 45 hours working each week. Swedish mothers work on average 33.2 hours a week, as compared to American mothers' 36.7 hours a week. Yet, the average total household

employment hours for Swedish heterosexual couples is 69.4 hours, compared to 65.8 hours for American couples. What explains this difference? Only 12% of Swedish mothers are outside the labor market, compared to one third of American mothers. Although a larger proportion of Swedish mothers work part-time, Swedish households' productivity is higher, in part because men work shorter hours (making women's employment more feasible), and because other supports help Swedish mothers remain in the labor market, while one-third of American mothers cannot do so. Therefore, trends in employment need to be unpacked to understand how much women and mothers are employed, as well as how this compares to men's employment hours.

# Explaining Cross-National Variations in Women's Employment and Gendered Households

Individual-level and neo-classical economics emphasize the importance of human capital in employment decisions. Women with less skill or education command a lower wage in the labor market, and likely hold less rewarding jobs. The choice to exit the labor market in favor of increasing care for children should be more attractive to those with lower human capital.

Extending this argument to the highly educated, these women have a higher opportunity cost for labor market exit, both in terms of wages foregone and in careers potentially derailed by a significant break for child-raising. Indeed, highly educated women are more likely to benefit from well-paid employment (Pettit and Hook 2005, 2009; Hicks and Kenworthy 2008). More highly educated women are also less likely to leave the labor market after becoming mothers across countries (Rubery 1999; Evans 2002; OECD 2002b; Pettit and Hook 2005, 2009; Tranby 2008). Women with higher educational attainment not only reap the rewards of better pay, but are consequently in a position to pay for services like childcare even when they are not provided through the state. If there are differences in women's educational attainment across countries,

this might explain any variation in women's employment.

Similarly, other human capital measures, such as job experience (which might be captured through a proxy such as age), should be positively associated with women's employment. From this perspective, cross-national differences in the rates of women's employment and the differences in women's working hours may simply be responses to different national costs and benefits structures to women's employment, or different rates of educational attainment across countries.

From a household specialization perspective, women's choices to be wage-earners may be based in economic calculations they make jointly with their partners, regarding each partner's mix of human capital and pre-existing gender differentials in pay in the relevant labor market (Becker 1981). Household specialization may mean that women (particularly mothers) with partners are somewhat less likely to be employed, or to be employed full-time. In addition, women who live in households with higher levels of household income other than their own earnings are somewhat less likely to be employed, or employed full-time. The additional income from a partner, other household earnings, or other resources may enable women to choose to spend time caring, rather than being employed or employed full-time outside the home. On the other hand, due to marital homophily wherein high-earning women tend to marry high-earning men, partner's income might not have a simple linear effect on women's likelihood of employment. The opportunity cost for high-earning women's care-related labor market exit is greater and suggests there may be curvilinear effects of other household income on mothers' likelihoods of employment.

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<sup>&</sup>lt;sup>1</sup> Scholars who examine employment by age do note a variety of different patterns by country, but for our purposes, we focus on age as a measurement of potential experience. Since the LIS data does not provide information about the age that respondents finish their education and respectively enter the labor market, we use age as a proxy measure for potential work experience. Given that we constrain our sample to women of childbearing age (25-45), we believe this to be a reasonable approach.

Stier et al. (2001) develop complex analyses of how women's employment status varies after marriage but before children, when children are preschool, and when children are schoolage for twelve countries (Australia, Austria, Canada, Germany, Israel, Italy, the Netherlands, New Zealand, Norway, Sweden, UK, and the US). They note that there are dramatic shifts in employment patterns as children enter households, but also that there are important crossnational differences in how women's employment patterns change over the life course, and how women are penalized for nonstandard work hours.

Yet, as Jacobs and Gerson (2001, 2004) persuasively argue, it is important to recognize how trends in working time operate within households. In the United States, they document a shift, over time, from male-breadwinner families to dual-earner and single-parent families; understanding pressures due to working hours requires recognizing how households' working hours are organized (also see Sayer 2005). Waldfogel et al. (2010) argue that changes in American family working hours over the past thirty years reflect a shift to full-time work for both partnered and single mothers. Taking a cross-national perspective on household hours can give us additional traction in understanding how working time in households may be shaped by different contexts. As Jacobs and Gornick (2002, p. 174) argue, "Considering couples' joint working time in conjunction with the gender breakdown in couples' hours provides a valuable starting point for identifying labor market and social policy provisions hat are consistent with . . . alleviating families' time squeeze and facilitating gender equality."

Looking across ten nations (Belgium, Canada, Finland, France, Germany, Italy, Netherlands, Sweden, UK, and US) in the mid-1990s, Jerry Jacobs and colleagues (Jacobs and Gornick 2002; Jacobs and Gerston 2004) note that examining household hours cross-nationally indicates a much larger proportion of American dual earner couples (25-59) jointly working

more than 80 and more than 100 hours than dual earner couples in other countries. Jacobs and Gornick (2002) show that the relationship between gender egalitarianism and household employment hours varies by context in even greater detail. A number of European countries have emphasized reduced working time – in part as an attempt to limit unemployment (more people working, but shorter workweeks) – which has contributed to greater gender equity in the proportion of household hours contributed by women (Jacobs and Gornick 2002; Jacobs and Gerson 2004).

Similarly, Mutari and Figart (2001) develop a cross-national model of work-time regimes, which vary both in gender equity and flexibility. These include a male breadwinner work-time regime, which is low in both flexibility and gender equity (e.g., Spain and Italy); a liberal flexibilization work time regime, which is high in flexibility but low in gender equity (e.g., Ireland, the UK); a solidaristic gender equity model, which is low in flexibility, but high in gender equity (France, Denmark); and high road flexibilization, which is high in both flexibility and gender equity (no countries fit this regime). They also identify several countries as "transitional," including Sweden, the Netherlands, and West Germany. Although they prefer high road flexibilization, the most effective regime that empirically exists is the solidaristic gender equity model, which emphasizes lower levels of overtime, active movements to shorten workweeks, and "shortening hours for both men and women" (Mutari and Figart 2001, p. 4).

While in a companion paper (Misra et al. 2009), we explore how structural and cultural factors shape cross-national patterns in employment rates and hours (Pfau-Effinger 1998, 2004; Rubery et al. 1999; Orloff, O'Connor, and Shaver 1999; Daly 2000; Korpi 2000; Stier, Lewin-

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<sup>&</sup>lt;sup>2</sup> Mutari and Figart's analysis suggests that the Netherlands is similar to the UK liberal flexibilization model, except that Dutch men have shorter working hours; Sweden is similar to the solidaristic gender equity model, except that Swedish women have higher levels of part-time employment; while West Germany is on the road to either high road (doubtful) or liberal flexibilization, promoting part-time jobs for married women.

Epstein, and Braun 2001; Orloff 2002; OECD 2002a, 2002b; Bainbridge, Meyers, and Waldfogel 2003; Gornick and Meyers 2003; Stryker and Eliason 2004; Kremer 2005; Pettit and Hook 2005, 2009; Mandel and Semyonov 2005; Lewis 2006; Eliason, Stryker, and Tranby 2008; Tranby 2008; Kenworthy 2008; Mandel 2009), in this paper, we simply examine how gender and parenthood affect the probability of employment and employment hours, controlling for a number of individual factors. We pay attention both to employment, and whether employment is part-time or full-time, as part-time work has different consequences for workers' earnings and career trajectories, and, as some scholars argue, different "trade-offs" (Mandel and Semyonov 2006; Pettit and Hook 2009). We also look at employment hours, and how these play out among heterosexually partnered households, in terms of total household hours and women's share of household hours. We pay particular attention to the ways in which not just gender, but parenthood, shapes these outcomes for both men and women.

#### **Methods & Data**

We use data from multiple sources. The individual-level data comes from the Luxembourg Income Study (LIS). The LIS harmonizes separately collected national survey data on households, income (including transfer income), and employment. Surveys and samples are detailed in Table A1 in the Appendix. We mainly use data from LIS wave 5 (data from around 2000) for 19 countries. We examine former East and West Germany separately, due to the persistent differences in employment patterns and different policy legacies (Rosenfeld, Trappe, and Gornick 2004). This results in 20 country cases included in the analysis. For all countries, the sample is restricted to adults aged 25 to 45 (prime years for childrearing), who are not in the

military.<sup>3</sup> We capitalize on a strength of the LIS, by not only analyzing data for individuals, but also exploring employment patterns by household. Therefore, we can understand how gendered negotiations around employment hours plays out within households.

We conduct two sets of analyses applying different restrictions on the samples.<sup>4</sup> First we estimate employment rates and the effects of gender and parenthood on the probabilities of employment. Next, we restrict the sample to employed persons and estimate full-time employment rates and then examine the ways gender and parenthood impact the probabilities of full-time employment. Respondents working 30 hours per week or more are coded as full-time employed.<sup>5</sup> We also compute, for heterosexually partnered households, the average household employment hours, and the percentage of those hours performed by women, for both parents and childless couples.<sup>6</sup>

To examine the impact of gender and parenthood on overall and full-time employment, we run separate logistic regressions for each country. For the first set of regressions the dependent variable is a dichotomous variable coded 0 if not employed and coded 1 if employed, regardless of

<sup>&</sup>lt;sup>3</sup> The samples include respondents in dependent employment, self-employed and not employed respondents. For our analyses of full-time employment, we exclude the self-employed because the measure of working hours are not reliably included for self-employed across all the countries under study. As Budig (2006) shows, self-employment can be a solution for women who wish to be employed, but do not have access to childcare and other services. We would rather include the self-employed, yet imputing hours data for the self-employed in the countries that did not include hours data would mean that for many of our analyses, we would be working with an imputed dependent variable. We believe the better solution is to focus on the dependent employed for our equation predicting full-time employment.

<sup>4</sup> An alternative approach is multinomial logistic regressions, which differentiate between outcomes of not

<sup>&</sup>lt;sup>4</sup> An alternative approach is multinomial logistic regressions, which differentiate between outcomes of not employed, part-time employed, and full-time employed. Yet, in our experience (Misra et al. 2007a), interpreting these models is less straightforward, leading to our choice of running two sets of logistic regressions.

<sup>&</sup>lt;sup>5</sup> In Finland weekly hours are not available. To construct a measure of full-time employment, we used the number of weeks worked full-time and weeks worked part-time in the survey year. If a respondent spent a majority of the weeks in full-time employment he or she was coded as full-time employed.

<sup>&</sup>lt;sup>6</sup> We excluded the very few cases of households where no one reported employment hours.

the number of usual hours worked.<sup>7</sup> Respondents on temporary leave (such as maternity, parental or sick leave) and respondents in on-the-job training programs are only coded as employed if there is a clear indication that they still have a link to their job, for example if they report earnings (Luxembourg Income Study 2009). For the second set of models run on employed persons only, the dependent variable is a dichotomous variable coded 0 if part-time and 1 if full-time employment (i.e. working 30 hours or more per week).

The independent variables of interest are gender of respondent (man=0, woman=1) and a dichotomous variable indicating whether the respondent has children living at home (childless=0, parent=1).8 Other individual-level independent variables include relationship status (=0 if single, =1 if cohabiting or married), respondent's age (in years), educational attainment measured with a dummy variable=1 to indicate post-secondary education or occupational training leading to certification, other household income and other household income squared (total household income minus respondents' earnings). These individual-level control variables capture the factors that matter for the household specialization argument: parenthood, marriage or cohabitation, low human capital, and high other household income should all reduce the probability of employment, and of full-time employment.

# **Findings**

Employment and Full Employment for Men and Women by Parenthood Status

Our multivariate analyses allow us to control for a variety of individual and householdlevel factors and may help explain differences in women's employment rates. We estimate

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<sup>&</sup>lt;sup>7</sup> For a majority of countries we use a measure of labor force status at the time of the survey to construct our measure of employment status. In Finland, Italy, and Sweden labor force status in the income reference period is used.

<sup>&</sup>lt;sup>8</sup> Due to data limitations, only mothers and fathers with children living in their household can be identified. This likely leads to underestimation of the effects of parenthood.

logistic regression models, predicting the likelihood of employment for all adults between 25-45, and then separate logistic models, predicting the likelihood of full-time employment for all employed adults between 25-45. We test for significant differences in employment probabilities by gender and parenthood status by including interaction terms between gender and parenthood in the models. We include a number of control measures that predict employment – age, whether the respondent is married or partnered, educational attainment, and any other income in the household (household income minus the respondents' income), as well as this other household income squared (on the assumption that other income will have a curvilinear effect). In these equations, these controls acted as expected, with education showing the strongest effects (Kenworthy and Hicks 2009) outside of our variables of interest. We focus on the net effects of gender and parenthood on the probability of overall and full-time employment. Although the controls act as expected, cross-national variation in women's employment remains.

Table One presents the predicted probabilities for overall employment for childless men, fathers, childless women, and mothers between 25-45, as well as the predicted probabilities for full-time employment from among employed childless men, fathers, childless women, and mothers, controlling for age, education, partnered status, income, and other income squared. It is important to note that the denominator in the full-time employment columns includes only those who are employed. These trends are surprisingly similar to the unadjusted employment rates

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<sup>&</sup>lt;sup>9</sup> As noted earlier, we do not include the self-employed in the models presented predicting full-time employment, because hours data for the self-employed were not consistently available for the countries in our sample, and we did not want to impute the dependent variable (full-time employment). We also ran the same models – including the self-employed – for a smaller group of countries. These findings did not vary in significant ways, so we present the findings for the larger groups of countries, but constrained to those who are not self-employed.

<sup>&</sup>lt;sup>10</sup> We define full-time employment rates quite liberally, as employment for 30 hours or more a week. Had we used a stricter definition of full-time employment, such as 38 hours a week, the ratios of men's to women's employment that we present below would be even larger.

<sup>&</sup>lt;sup>11</sup> Full regression models are available on request from the authors.

presented in Appendix table A2, suggesting that it is not simply differences in household specialization or in human capital driving the cross-national variation we observe.

# [Table One about Here]

One thing is clear: men in their prime childbearing years (between 25-45) are more likely to be employed than women of the same age group. Differences in employment rates within gender by parenthood status are oppositional: among men, parenthood is associated with higher overall and full-time employment, while among women parenthood reduces full-time employment and overall employment (with the exception of Sweden and Russia). Gender differences are also pronounced: for every country in our sample, men have higher employment rates than women. Despite this, childless men and childless women look relatively similar, although childless women are less likely to be employed in every country except Russia, Hungary, and East Germany. Yet, notably, there are smaller differences between childless men and women, than there are between childless women and mothers. The most dramatic differences in full-time employment are among employed mothers and fathers. By the turn of the 21st century, gender made remarkably little difference in employment among the childless (although this is clearly less true in Spain and Italy). Parenthood has become a more crucial axis of differences in employment, although parenthood itself is gendered, with – for the most part – fathers being more likely to be employed than childless men, and mothers being less likely to be employed than childless women (see also, OECD 2002b).

Figure One shows the difference between predicted probabilities of fathers' employment and childless men's employment, childless women's employment, and mothers' employment, controlling for age, education, partnered status, income, and other income squared. The black bars show the differences between mothers' and fathers' predicted probabilities of employment;

the dark gray bars show the difference between childless women's and fathers' predicted probabilities of employment; and the light grey bars show the difference between childless men's and fathers' predicted probabilities of employment.

# [Figure One About Here]

Childless men's predicted probabilities typically fall only a little below fathers,' and childless women's predicted probabilities are fairly similar to childless men's predicted probabilities. Only Spain and Italy have dramatically lower levels of childless women's predicted probabilities of employment. In striking contrast, the black bars draw attention to how much lower mothers' predicted probabilities of employment are, even net of controls. For every country, other than Sweden and East Germany, mothers are remarkably less likely to be employed, particularly in comparison to fathers. Even in Spain and Italy, with childless women's low predicted probabilities of employment, mothers' predicted probabilities are even lower.

Figure Two presents the same information, for the difference between predicted probabilities of fathers' *full-time employment* and childless men's, childless women's, and mothers' *full-time employment*, net of controls. Again, the black bars show the differences between mothers' and fathers' predicted probabilities of full-time employment, using the same bar shading scheme as the prior graph. Again, the differences between mothers' and fathers' predicted probabilities of full-time employment are the most dramatic. It is interesting, as well, to note that the differences between fathers' and mothers' predicted probabilities for full-time employment leads to a different line-up of countries from the difference between fathers' and mothers' predicted probabilities for employment, displayed in Figure One. While the differences between fathers and mothers are relatively small in both figures for Russia, for Sweden they are small for employment, but larger for full-time employment. And while West Germany shows

relatively large gaps for both employment and full-time employment, the Netherlands has smaller employment gaps and much larger full-time employment gaps.

# [Figure Two About Here]

These trends should make clear two points: (1) the differences in net employment and full-time employment probabilities are larger between fathers and mothers than childless women and childless men, and (2) full-time employment among mothers is relatively rare, even where women's employment levels are high; (3) employment rates and full-time employment rates are not perfectly associated; countries vary in how strongly patterns of mothers' employment and full-time employment are correlated. This suggests that there are differences in context; in some countries mothers are less likely to be employed than in other countries, but when employed, more likely to work full-time; in other countries mothers are more likely to be employed than in other countries, but when employed, more likely to work part-time. These patterns might reflect differences in the availability of part-time jobs, as well as in other available supports for parental employment. Since childless women's patterns look more similar to childless men's patterns, caregiving responsibilities for mothers (as well as expectations of breadwinning for fathers) may help explain much of the variation in women's employment rates cross-nationally. This suggests that gender and parenthood intersect to create different employment patterns, and that understanding women's employment requires a focus on how employment and full-time employment are associated.

# Mothers' Rates of Employment and Full-Time Employment

Figure Three summarizes the association between predicted probabilities for mothers' employment, and predicted probabilities for mothers' full-time employment presented in Table

One. This mapping allows us to identify clear differences in the ways mothers are engaged in employment and full-time employment across these countries, controlling for individual/household level factors. Of course, the clusters we draw are only one potential way of mapping the countries; there is also variation within each cluster; the figure should make this clear. However, we think that the clustering also helps point out some of the salient characteristics of mothers' employment across these countries. We also identify countries as those with high levels of women's employment (including both mothers and childless women), which are represented by bold text in the figure; those with moderate levels of women's employment, which are italicized in the figure; and finally, those with lower levels of women's employment, which are underlined in the figure. The correlation between women's employment, mothers' employment, and mothers' full-time employment is not perfect, but there is a clear association. It appears that there are a variety of strategies that countries have taken regarding mothers' employment.

# [Figure Three About Here]

In the high employment/full-time cluster (Czech, East Germany, Russia, and the United States), mothers have relatively high levels of both employment and full-time employment. Here, mothers may be relying on family care, market-provided care (as in the United States), or state provisioning developed during the Soviet period. <sup>13</sup> In either case, these women's incomes are likely important to the wellbeing of their families. In the high employment/moderate full-time cluster (Canada, France, Belgium, Luxembourg, Sweden, Austria), employment for mothers is quite high, but full-time employment is somewhat moderated. For example, in Sweden, mothers'

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We also create this plot by mapping mothers' employment hours against employment rates; the basic pattern matches Figure Three, but Figure Three's depiction of the relationship is clearer.
 Levels of provision have decreased dramatically in the 1990's in Central and Eastern European

<sup>&</sup>lt;sup>13</sup> Levels of provision have decreased dramatically in the 1990's in Central and Eastern European countries, especially for young children.

employment itself is remarkably high, yet a relatively large group of employed mothers work part-time (less than 30 hours a week). These countries' policies may support part-time employment strategies, although we cannot tell from this data whether these part-time strategies are marginalizing or integrating (Rubery et al. 1999). In the moderate employment/high full-time cluster (Finland, Hungary), it appears that mothers are slightly less likely to be engaged in employment, but once they are engaged, they are likely to work at full-time levels. This may relate to a lack of support in these countries for part-time employment as a strategy. Yet these three clusters represent countries where mothers are quite highly engaged in the labor force.

This leaves us with three other clusters, where mothers are more variably engaged in the labor force. In the high employment/low full-time cluster, the Netherlands stands alone. While the employment rate is amazingly high (particularly relative to Dutch mothers' employment a decade earlier; see Misra and Jude 2008), most mothers work part-time. Although Holland's "combination model" of shared care and employment for men and women has been much touted (Gardiner 2000), in actuality the model promotes part-time employment for mothers and full-time employment for fathers. This strategy is quite similar in the moderate employment/low full-time cluster (Australia, Ireland, UK, and West Germany), although full-time rates are somewhat higher, and employment broadly is somewhat lower. Here, it is clear that (at least some partnered) mothers have a choice between employment and care, and that once employed, part-time employment serves as a strategy to balance employment and care. Finally, the last low employment/moderate full-time employment cluster (Spain, Italy, and Israel) presents a quite different balance. Here, fewer mothers enter the workforce (more in Israel than either Spain or Italy), while those employed have moderate levels of full-time employment (Cousins 2000;

Mutari and Figart 2001; Stratigaki 2004).<sup>14</sup>

These cluster that identify differences in *what proportion* of women are employed *and* whether that employment is *full-time* might help explain some of the contradictory results in the welfare state literature. For example, women in Spain and Italy may be less constrained to lower-level jobs (Mandel and Semyonov 2006); yet their performance may be related to the "creaming effect" that relatively low levels of women's (and mothers') employment might create. At the same time, the explosion in Dutch mothers' employment is not necessarily due to successes at drawing Dutch men into shared work and care (Gardiner 2000), but due to Dutch mothers' very high integration into part-time employment. These patterns suggest that variations in women's hours may be related to other phenomenon – including men's hours. We explore these issues by focusing on household hours in the next section.

# Joint Working Time by Parenthood Status

Jacobs and Gerson (2004) argue that examining joint working time for couples helps understand how couples negotiate time pressures. In this section, we focus our analysis on heterosexually partnered households, <sup>15</sup> since we are interested in how the employment hours are negotiated within households. In Table Four, we present both the employment rate, and the average number of hours of employment, for men and women in heterosexually coupled

<sup>&</sup>lt;sup>14</sup> Interestingly, the few women employed in Italian and Spanish labor markets tend to experience less gender occupational segregation and smaller wage gaps. Mandel (2009, p. 703) comments, "low participation of women in paid work is parlayed into relatively favourable attainments for those who do enter the labour market. . . One plausible explanation is that women who enter an economy dependent on highly-committed male labour tend to be highly qualified. They are a relatively select group able to compete with men in a labour market that is not adapted to women and does not offer them preferential terms of employment."

<sup>&</sup>lt;sup>15</sup> While we would also like to explore these patterns for same-sex partnered households with children, sample sizes are simply too small to analyze.

households with children, as well as those for lone mothers.<sup>16</sup> This table describes whether mothers and fathers are employed; for those who are employed, average employment hours; and average total household employment hours, calculated by household (which includes total hours for those who are not employed as working 0 hours).<sup>17</sup>

As in our earlier analyses of individuals, fathers in heterosexually coupled households are much more likely to be employed than mothers and are employed for many more hours per week, in every country in our sample. Yet, there remain a number of important variations.

Average total household hours – with this measure including 0 hours for those who do not work – varies dramatically, from 52.6 hours in the Netherlands, to 73.7 in the Czech Republic. Clearly, work-life conflict is likely to be more severe in countries where average total household hours are high. At the same time, gender equality may be somewhat compromised when women are not engaged in the labor market, or only work a few hours each week.

Figure Four focuses on heterosexually coupled households, with at least one employed partner. This figure describes the "typical" gendered arrangements by country. For example, in the United States, in approximately 30% of these households (light grey bar), the woman does not work, and in another 25% of these households (dark grey bar), the man works more hours than the woman. Yet in a third of these households (black bar), the man and the woman work approximately the same number of hours a week. Relatively few households include women working more hours than men (small stripes), or men not working (large stripes).

What patterns appear in this data? The figure is ordered from those countries with the lowest levels of "male-breadwinner" households (where women are not employed, or employed

<sup>16</sup> Lone mothers work slightly more hours than partnered mothers in most countries; we will not discuss lone mothers further in this paper, but plan to develop this theme in a separate paper.

<sup>&</sup>lt;sup>17</sup> Adding the average total hours for employed mothers and fathers would not result in total household hours.

less than men) on the left, to those with the highest levels of "male-breadwinner" households on the right. The Netherlands (85%), West Germany (80%), and the United Kingdom (80%) have the highest level of "male breadwinner" households. Sweden, Czech Republic, and Russia have the lowest levels of these male-breadwinner households (approximately 50%). Sweden also is notable for its very low numbers of households with women outside of the labor market; Spain, Italy, and Luxembourg conversely have very high numbers of women in heterosexually partnered households outside the labor market entirely. Czech Republic (43%), Sweden (41%), and the United States (34%) have the highest number of households with relatively equitable hours distributions; the Netherlands (6%), West Germany (8%), and the United Kingdom (12%) have the lowest number of these households with relatively equitable distribution of household employment hours.

This figure makes clear that different countries tend to promote different patterns of employment hours: in countries like Sweden and Czech Republic, both men and women are deeply engaged in the labor market. On the other hand, countries like the Netherlands, West Germany, and the United Kingdom promote more of a "male-breadwinner" model, though Spain and Italy have much higher levels of women completely outside of the labor market. As Cousins (2000, p. 17) claims for Southern European countries, like Spain and Italy, "such a dispersion of jobs also perpetuates the traditional family structure, the division of labor within it and social right derived from the husband." And there is remarkable variation across these countries in how prevalent relatively equal employment hours within households are. All in all, different countries have reflect different patterns of how households balance employment hours between household members.

<sup>&</sup>lt;sup>18</sup> Mutari and Figart (2001) characterize the United Kingdom as a liberal flexibilization regime, since women work part-time, while men work long full-time hours.

In Figure Six, we explore women's hours as a proportion of the total household employment hours (on the Y-axis) plotted against total household employment hours (on the X-axis). In this figure, we have plotted household hours for both childless coupled households (in grey circles) and for coupled households with children (in black triangles). We also include lines that describe the relationship between women's proportion of total household employment hours with total household employment hours. Clearly, as total household hours go up, women's share of total household hours also goes up. Yet, these trends are different for childless households. Childless women's employment hours cluster between forty and fifty percent of total household hours, with a relatively flat line describing the relationship between women's proportion of hours and total household hours, with a much steeper (positive) line describing the relationship between women's proportion of hours and total household hours.

In some countries, overall household employment hours are relatively low, and in these countries (e.g., Spain, the Netherlands, Israel), fathers are employed for much longer hours than mothers. In other countries, overall employment hours are higher, and mothers are contributing more of these hours (Czech, Sweden, Russia). Understanding the relationship between women's employment hours and employment, then, requires understanding mens' employment hours and total household hours.

In Table Three, we present our cross-national models of work-time regimes by balancing gender equity in the division of employment hours against total household hours. We categorize high household employment hours as 70 hours/week and above; moderate household employment hours as 60-69.9 hours/week, and low household employment hours as below 60 hours/week. We categorize high levels of gender equity in the division of household employment

hours as when women work 38% or more of total household hours; moderate gender equity when women work 31-38% of total household hours, and low gender equity when women work less than 31% of total household hours.

This leaves us with seven different groupings of countries, since no countries have high total household hours and low gender equity or low total household hours and high gender equity. Ireland, Italy, Luxembourg, the Netherlands, Spain, and West Germany are all countries that emphasize either non-employment or part-time employment for mothers. While this means that total household hours overall are relatively low, which may help address work-life conflict, women's relatively low levels of engagement in employment may limit gender equity. Israel is relatively similar on total household hours, but has somewhat higher levels of women's engagement in the labor force.

Austria and the United Kingdom have pursued higher levels of part-time employment for mothers, combined with moderate to long hours for fathers. This leads to moderate total household hours, but relatively low gender equity, as Austrian and British mothers contribute a relatively small proportion of total household hours. Here work-life conflict may be somewhat higher, and again relies on women doing much of the carework. On the other hand, Belgium, Canada, France, and the United States illustrate moderate total household hours combined with moderate gender equity. Here, although some mothers are outside of the labor market, many mothers work relatively long hours, while men work moderate to long hours. This leads to greater gender equity than in the UK or Austria, but less than in Sweden and East Germany, where mothers represent a relatively large proportion of household hours. Swedish women have moderate full-time employment rates, even though they have very high employment rates. Yet, since Swedish fathers' employment hours are not remarkably long, the combination of many

Swedish mothers employed with moderate levels of full-time employment, makes Sweden a relatively gender egalitarian country for parents. On the other hand, the United States has somewhat lower levels of mothers' employment, though higher levels of full-time employment. But since U.S. fathers work relatively long hours, and many U.S. mothers are out of the labor market entirely, the United States is less egalitarian (though, not exceptionally inegalitarian). In order to make sense of cross-nationally variations in employment patterns, then, it is crucial to recognize both fathers' and mothers' patterns, as well as total household hours. Mutari and Figart (2001, p. 56) similarly suggest that "policies to shorten the work week and challenge the norms of full-time employment – as in the solidaristic gender equity work time regimes – still offer the best prospects for gender equity."

Finally, several Eastern European countries evidence high total household hours. These countries have been shaped by a legacy of high levels of women's employment and support for working parents, but are also currently affected by economically challenging contexts, including relatively high levels of unemployment. The Czech Republic is particularly notable, in its exceptionally high levels of total household hours (73.7). Such high levels of household hours would not be possible without women's engagement in employment; yet in Russia, mothers' employment share is quite large, in part due to higher levels of unemployment among Russian men. While these countries evidence somewhat higher levels of gender equity, it comes at a real price, as such long total household hours surely exacerbates work-life conflict.

In their analysis of joint work hours, Jacobs and Gerson (2004, p. 138-39) similarly argue, "In most countries, moderation and balance, rather than very long or very short workweeks, appear to promote gender equality as well as to best fit the ideals of most workers, although the balance point at present involves more working time in some countries . . . than in

others." Cha (2010) further argues, drawing on analyses of longitudinal U.S. data that husband's long work hours (overwork) can affect their wives' careers, particularly for parents. Controlling for a variety of other factors, she shows that women, including professional/managerial women are more likely to quit their jobs if their husbands work sixty or more hours a week, and that husband's work hours positively interact with parenthood.

In their model of work-time regimes based on both men's and women's working hours, Mutari and Figart (2001) similarly draw attention to how joint working hours can help support gender equity. In their solidaristic gender equity work-time regime, they argue that certain countries – Belgium, Denmark, Finland, and France – which combine low rates of men's overtime with low rates of women's part-time, lead to greater gender equity. While we agree that those countries with moderate levels of household employment hours are more likely to lead to gender equity, we further note that there are important variations, depending on how many mothers exit the labor force, as well as how mothers' employment hours compare to fathers' employment hours.

Many analysts of gender and employment have emphasized the importance of flexibility and part-time hours as a work-time strategy. As Rubery, Smith, and Fagan (1999, p. 2) argue, "the position of women within the labour market depends not only on the level of part-time work opportunities, but also on the form of part-time working across societies, whether it is organized as a marginalized and casual employment form or as an integrated and protected employment form." Support for part-time employment may raise the quality and availability of part-time work, so that both men and women can be engaged in meaningful part-time work, while also being able to spend time on care (Mutari and Figart 2001; Gornick and Meyers 2003; Gornick and Heron 2006; Bardasi and Gornick 2008). Yet, we find that in most, if not all, countries, high

levels of part-time work may go along with fewer mothers in the workforce, and then reflect gendered assumptions that can reinforce inequalities.

There are, of course, important differences between countries. The two Germanies are illustrate this trend. While more than three-quarters of East German heterosexually partnered mothers are employed, only 57% of West German partnered mothers are employed. At the same time, East German employed mothers partnered work approximately 37 hours/week, compared to 30 hours/week for West Germany employed partnered mothers. These differences affect both total household hours for these families (with East German families having higher total household hours), and gender equity (with East Germany mothers' greater share of total household hours). While Mutari and Figart (2001) view greater flexibility as preferable, we view a dual full-time model with moderate full-time hours (less than 42/week) as a more effective alternative to models that emphasize part-time employment, in part because part-time models tend to undermine gender equity.

To come back full circle, these findings suggest again that childless women's employment patterns are relatively similar to men's, except for Spain and Italy, where childless women's patterns approximate those for mothers in other countries. Among mothers crossnationally, there are remarkably large variations, with mothers' hours composing a substantial amount of total household employment hours in some countries (Sweden, Russia, East Germany), and a relatively small amount in other countries (Spain, Italy). Differences in crossnational patterns for both mothers' caregiving and fathers' breadwinning remain central to understanding cross-national differences in women's employment more broadly.

# **Discussions and Conclusions**

We have explored women's and mothers' employment patterns, relative to men's, and identified substantial variation across countries. Our findings also point out that in most countries, the variation between mothers' and childless women is larger than that between childless men and childless women. This suggests that differences in women's employment patterns are not so much driven by gender, as by *gendered parenthood*, with fathers employed at higher levels and mothers employed at significantly lower levels. In addition, this variation remains salient, even when we control for individual and household-level factors, such as women's human capital, and partnered status and household income. This suggests that women's, and particularly mothers' choices and preferences regarding employment remain bounded – structural and cultural contexts shape their opportunities.

We have also explored the way employment and full-time employment are associated, identifying clusters of countries based on patterns regarding both mothers' employment and full-time employment behaviors. We suggest that these clusters identify important differences in the strategies countries – and women – have pursued to balance work and family life. For example, countries with high employment and high full-time employment, such as the United States or the Czech Republic, are quite different from countries with high employment but only moderate full-time employment, such as France and Sweden. In the second grouping, mothers – particularly when their children are young – cut back on their hours of employment, but remain attached to the labor market. Another grouping of countries with moderate employment and low full-time employment, such as West Germany or the United Kingdom, takes this approach one step further, leading to even lower levels of labor force attachment. In the Netherlands, with high employment but very low full-time employment, this strategy is exaggerated further. Moderate employment but high full-time employment countries, like Hungary and Finland, take another

tact; Finland does have exceptionally high full-time employment rates, but this must be read in a context where some (but not many) women leave the labor market altogether. Finally, low employment and moderate full-time employment countries, like Spain and Italy, have relatively few mothers employed, but more employed mothers working full-time.

Finally, we have explored the meanings of these differences for how men and women in heterosexually partnered households divide employment hours, and how this relates to overall household employment hours. Heterosexually partnered childless men and women's employment hours are relatively similar whether overall household employment hours are short or long. However, fathers and mothers' employment hours in the same household vary much more cross-nationally, from with women contributing a smaller proportion of employment hours in countries with fewer total employment hours, and a larger proportion in those with higher employment hours. Along with this, though, is how employment rates and employment hours intersect: where women routinely take employment breaks when they become mothers, the distribution of employment hours is less egalitarian. At the same time, in countries with very high household employment hours, gender egalitarian divisions of employment hours may signal high levels of stress for working parents (as in the Czech Republic or Russia).

One of the clearest patterns, though, is that where men work very long hours, women work fewer hours; these findings resonate with Cha's (2010) assertion about wives' (but not husbands') greater probabilities of quitting jobs when their partner works longer hours (exacerbated when the couple has children). These findings also are supported by Hook's (2010) findings that men do less housework, and women do more housework, in countries where men's average weekly hours are particularly long. Clearly, men's employment hours are important to understanding the equation of work-life balance. As Jacobs and Gerson (2004, p. 130) argue,

"Understanding how couples apportion paid working time also provides a valuable starting point for identifying social policies that can alleviate domestic time squeezes while supporting egalitarian gender arrangements."

We would argue that recognizing these different patterns, and what they suggest, is important to understanding differences in women's employment trajectories – not only regarding employment, but also regarding wages and occupations. Future research should explore these issues in greater detail. If, for example, wage penalties or occupational gender segregation appear lower in countries with relatively low levels of mothers' employment, this might suggest a trade-off between inclusive labor markets (which engage a larger number of mothers, but do not reward them) and exclusive labor markets (which engage fewer mothers, perhaps those with higher levels of human capital, but reward them for their participation). At the same time, we need to recognize what these employment patterns suggest about men's tradeoffs regarding engagement in their families.

In addition, it is worth understanding better the factors that have led to differences in men's, women's, and household employment hours cross-nationally. Many scholars have considered how structural and cultural factors shape cross-national patterns in employment rates and hour, yet these analyses have often been focused on employment rates – without recognizing the wide dispersion of employment hours across countries – or have not fully analyzed household hours, and how men's and women's employment hours are linked. We hope that our contribution here helps clarify these issues, so that future analyses of the factors – including social and labor market policies – build upon these insights.

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Table One: Probability of Employment and Full-Time Employment by Gender and Parenthood (predicted probabilities controlling for age, relationship status, educational attainment, other household income, and other household income squared)

|             | All Working Age Adults:<br>Probability of Employment |       |         |       | All Employed Persons: Probability of Full-Time Employment |       |         |       |
|-------------|--|-------|---------|-------|---|-------|---------|-------|
|             | Childless  |       | Parents |       | Childless   |       | Parents |       |
|             | Men  | Women | Men     | Women | Men   | Women | Men     | Women |
| Sweden      | 0.902  | 0.872 | 0.949   | 0.847 | 0.883   | 0.802 | 0.936   | 0.657 |
| Russia      | 0.763  | 0.794 | 0.892   | 0.829 | 0.818   | 0.866 | 0.892   | 0.860 |
| Belgium     | 0.859  | 0.900 | 0.909   | 0.775 | 0.951   | 0.842 | 0.931   | 0.811 |
| Netherlands | 0.927  | 0.904 | 0.973   | 0.766 | 0.956   | 0.903 | 0.992   | 0.546 |
| Austria     | 0.959  | 0.936 | 0.969   | 0.762 | 0.932   | 0.853 | 0.967   | 0.279 |
| Canada      | 0.943  | 0.858 | 0.961   | 0.762 | 0.930   | 0.802 | 0.945   | 0.685 |
| Czech R.    | 0.941  | 0.928 | 0.971   | 0.752 | 0.988   | 0.967 | 0.994   | 0.957 |
| US          | 0.885  | 0.822 | 0.930   | 0.734 | 0.917   | 0.894 | 0.930   | 0.810 |
| France      | 0.979  | 0.928 | 0.981   | 0.729 | 0.983   | 0.924 | 0.998   | 0.676 |
| Finland     | 0.893  | 0.826 | 0.931   | 0.727 | 0.953   | 0.896 | 0.977   | 0.759 |
| UK          | 0.904  | 0.849 | 0.948   | 0.690 | 0.923   | 0.856 | 0.979   | 0.751 |
| W Germany   | 0.895  | 0.877 | 0.904   | 0.670 | 0.975   | 0.919 | 0.978   | 0.495 |
| E Germany   | 0.943  | 0.939 | 0.937   | 0.652 | 0.920   | 0.892 | 0.968   | 0.400 |
| Luxembourg  | 0.813  | 0.793 | 0.860   | 0.630 | 0.857   | 0.929 | 0.945   | 0.877 |
| Australia   | 0.862  | 0.801 | 0.923   | 0.626 | 0.974   | 0.951 | 0.994   | 0.915 |
| Ireland     | 0.910  | 0.902 | 0.954   | 0.611 | 0.961   | 0.814 | 0.966   | 0.513 |
| Hungary     | 0.904  | 0.879 | 0.917   | 0.610 | 0.943   | 0.875 | 0.975   | 0.514 |
| Israel      | 0.827  | 0.738 | 0.853   | 0.593 | 0.937   | 0.865 | 0.971   | 0.740 |
| Spain       | 0.936  | 0.747 | 0.967   | 0.514 | 0.988   | 0.860 | 0.977   | 0.705 |
| Italy       | 0.930  | 0.703 | 0.953   | 0.497 | 0.960   | 0.857 | 0.964   | 0.763 |

Figure One: Difference between Predicted Probability of Father's Employment Rates and Employment Rates for Childless Men, Childless Women, and Mothers (controlling for age, relationship status, educational attainment, other household income, and other household income squared)

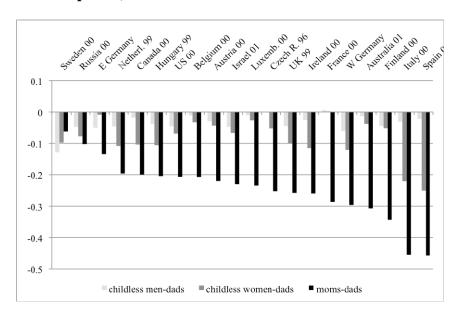


Figure Two: The Difference between Predicted Probabilities of Fathers' Full-Time Employment Rates and Full-Time Employment Rates for Childless Men, Childless Women, and Mothers (controlling for age, relationship status, educational attainment, other household income, and other household income squared)

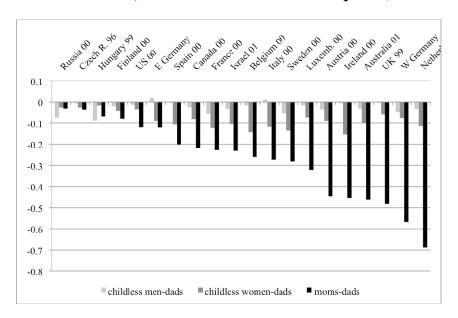


Figure Three: Predicted Probabilities of Mothers' Employment and Mothers' Full-Time Employment (controlling for age, relationship status, educational attainment, other household income, and other household income squared)

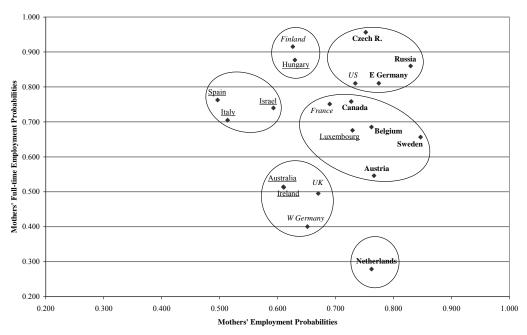


Table Two. Employment Rates and Average Hours in Coupled Households with Children and Lone Mother Households

|             | Coupled Households with Children |                      |                     |                      |                     |                    | <b>Lone Mother Households</b> |                       |                      |                                   |
|-------------|----------------------------------|----------------------|---------------------|----------------------|---------------------|--------------------|-------------------------------|-----------------------|----------------------|-----------------------------------|
|             |                                  | Moth                 | ners                | Fatl                 | hers                |                    |                               |                       |                      |                                   |
|             | N                                | Employ-<br>ment Rate | Average<br>Hours of | Employ-<br>ment Rate | Average<br>Hours of | Average<br>Total   | N                             | Employ-<br>ment Rates | Average<br>Hours of  | Average<br>Hours in all           |
|             |                                  |                      | Employed<br>Mothers |                      | Employed<br>Fathers | Household<br>Hours |                               | of Lone<br>Mothers    | Emp. Lone<br>Mothers | Lone<br>Mother<br>House-<br>holds |
| Austria     | 556                              | 0.72                 | 28.6                | 0.94                 | 44.3                | 62.5               | 60                            | 0.83                  | 33.6                 | 28.0                              |
| Belgium     | 718                              | 0.74                 | 32.6                | 0.93                 | 43.4                | 64.9               | 88                            | 0.61                  | 37.7                 | 23.3                              |
| Canada      | 6,041                            | 0.70                 | 33.1                | 0.92                 | 43.6                | 65.8               | 1,099                         | 0.72                  | 35.2                 | 27.3                              |
| Czech R.    | 7,015                            | 0.72                 | 40.6                | 0.96                 | 46.8                | 73.7               | 982                           | 0.80                  | 41.6                 | 33.1                              |
| France      | 2,475                            | 0.68                 | 34.0                | 0.93                 | 41.5                | 61.1               | 362                           | 0.70                  | 34.6                 | 26.6                              |
| Germany E   | 665                              | 0.77                 | 37.1                | 0.86                 | 46.4                | 67.3               | 106                           | 0.68                  | 36.9                 | 24.5                              |
| Germany W   | 2,169                            | 0.57                 | 30.0                | 0.87                 | 45.3                | 57.6               | 248                           | 0.73                  | 32.3                 | 23.4                              |
| Hungary     | 477                              | 0.70                 | 41.9                | 0.85                 | 55.2                | 71.2               | 42                            | 0.73                  | 46.0                 | 31.7                              |
| Ireland     | 709                              | 0.54                 | 28.8                | 0.89                 | 47.6                | 57.8               | 70                            | 0.71                  | 28.8                 | 20.5                              |
| Israel      | 1,818                            | 0.58                 | 35.8                | 0.81                 | 50.4                | 54.9               | 215                           | 0.64                  | 35.4                 | 22.5                              |
| Italy       | 1,801                            | 0.45                 | 35.4                | 0.95                 | 44.9                | 58.8               | 103                           | 0.64                  | 39.5                 | 27.5                              |
| Luxembourg  | 638                              | 0.59                 | 29.9                | 0.96                 | 44.3                | 58.4               | 54                            | 0.91                  | 39.0                 | 35.7                              |
| Netherlands | 1,278                            | 0.70                 | 21.0                | 0.89                 | 42.1                | 52.6               | 115                           | 0.66                  | 24.6                 | 16.3                              |
| Russia      | 885                              | 0.79                 | 43.1                | 0.85                 | 51.8                | 71.6               | 177                           | 0.88                  | 44.7                 | 36.7                              |
| Spain       | 1,088                            | 0.43                 | 34.0                | 0.92                 | 44.7                | 55.8               | 54                            | 0.76                  | 36.3                 | 27.8                              |
| Sweden      | 2,721                            | 0.88                 | 33.2                | 0.94                 | 40.5                | 69.4               | 356                           | 0.77                  | 34.3                 | 29.7                              |
| UK          | 4,555                            | 0.69                 | 28.6                | 0.89                 | 47.2                | 61.0               | 1,448                         | 0.47                  | 29.7                 | 13.7                              |
| US          | 9,210                            | 0.67                 | 36.7                | 0.92                 | 45.0                | 65.8               | 2,311                         | 0.76                  | 39.6                 | 30.2                              |

Figure Four. Heterosexual Households with Children: Distribution of Employment Hours Between Partners

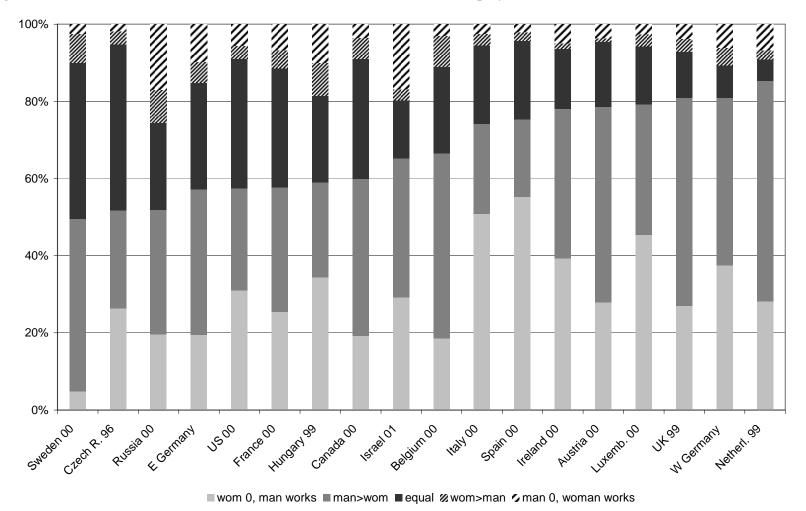
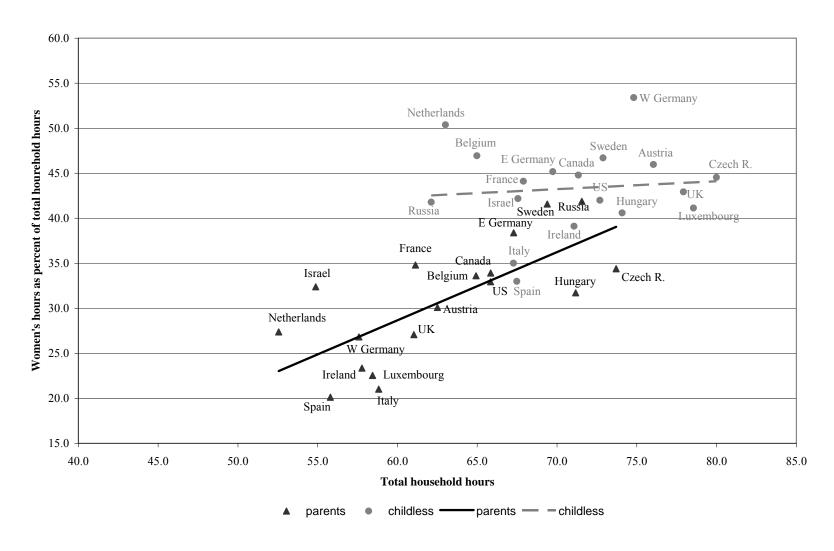


Figure Five. Women's Hours as a Percentage of Total Household Hours and Total Household Hours

## Women's Hours as % of Total Household Hours and Total Household Hours



## Table Three: Models of Work-Time Regimes for Heterosexual Parents, Balancing Gender Equity in Division of Employment Hours and Total Household Hours

|                           | Low Total<br>Household Hours  | Moderate Total<br>Household Hours                | High Total<br>Household Hours |
|---------------------------|---|--|-------------------------------|
| Low Gender Equity         | Ireland, Italy,<br>Luxembourg, the<br>Netherlands, Spain,<br>West Germany | Austria, the United<br>Kingdom                   |                               |
| Moderate Gender<br>Equity | Israel  | Belgium, Canada,<br>France, the United<br>States | Czech Republic,<br>Hungary    |
| High Gender Equity        |   | East Germany,<br>Sweden                          | Russia                        |

Appendix Table A1: Origins of individual level data and sample sizes

| Country        | Original Data Source                  | Survey | Full LIS | Sub-sample   | Sub-sample II |
|----------------|---------------------------------------|--------|----------|--------------|---------------|
|                |                                       | Year   | Sample   | I 25-45 year | employed 25-  |
|                |                                       |        |          | olds         | 45 year olds  |
| Australia      | Survey of Income & Housing Costs      | 2001   | 13,183   | 4,422        | 3,402         |
| Austria        | European Community Household Panel    | 2000   | 6,845    | 1,518        | 1,290         |
| Belgium        | Panel Study of Belgian Households     | 2000   | 6,935    | 2,027        | 1,720         |
| Canada         | Survey of Labour & Income Dynamics    | 2000   | 72,850   | 20,717       | 16,787        |
| Czech Republic | Czech Microcensus                     | 1996   | 71,836   | 17,773       | 15,313        |
| Finland        | Income Distribution Survey            | 2000   | 27,841   | 6,305        | 5,047         |
| France         | Household Budget Survey               | 2000   | 25,803   | 6,899        | 5,154         |
| Germany East   | German Social Economic Panel Study    | 2000   | 6,776    | 1,859        | 1,512         |
| Germany West   | German Social Economic Panel Study    | 2000   | 22,075   | 6,327        | 5,093         |
| Hungary        | Household Monitor Survey              | 1999   | 5,517    | 1,240        | 769           |
| Ireland        | Living in Ireland Survey / ECHP       | 2000   | 9,131    | 1,679        | 1,295         |
| Israel         | Household Expenditure Survey          | 2001   | 19,555   | 4,463        | 2,890         |
| Italy          | Survey on Household Income and Wealth | 2000   | 22,268   | 4,500        | 3,208         |
| Luxembourg     | Socio Economic Panel                  | 2000   | 6,240    | 1,973        | 1,603         |
| Netherlands    | Socio-Economic Panel                  | 1999   | 12,445   | 3,770        | 3,256         |
| Russia         | Russia Longitudinal Monitoring Survey | 2000   | 9,248    | 2,334        | 1,839         |
| Spain          | European Community Household Panel    | 2000   | 14,320   | 3,230        | 2,370         |
| Sweden         | Income Distribution Survey            | 2000   | 33,139   | 8,007        | 7,126         |
| United Kingdom | Family Resources Survey               | 1999   | 59,010   | 15,927       | 12,432        |
| United States  | Current Population Survey             | 2000   | 128,821  | 34,161       | 28,004        |

Appendix Table A2. Employment and Full-Time Employment Rates for Childless Men, Childless Women, Fathers, and Mothers by Country

|                  | Proportion Employed |       |         |       | Proportion Employed Full-Time |       |         |       |
|------------------|---------------------|-------|---------|-------|-------------------------------|-------|---------|-------|
|                  | Childless           |       | Parents |       | Childless                     |       | Parents |       |
|                  | Men                 | Women | Men     | Women | Men                           | Women | Men     | Women |
| Sweden           | 0.87                | 0.85  | 0.94    | 0.87  | 0.86                          | 0.78  | 0.94    | 0.70  |
| Russia           | 0.75                | 0.79  | 0.89    | 0.82  | 0.82                          | 0.87  | 0.89    | 0.86  |
| Belgium          | 0.94                | 0.87  | 0.96    | 0.78  | 0.95                          | 0.81  | 0.95    | 0.65  |
| E Germany        | 0.81                | 0.89  | 0.89    | 0.78  | 0.91                          | 0.88  | 0.97    | 0.80  |
| Canada           | 0.89                | 0.85  | 0.92    | 0.75  | 0.97                          | 0.89  | 0.98    | 0.75  |
| Czech R.         | 0.94                | 0.92  | 0.97    | 0.75  | 0.99                          | 0.97  | 0.99    | 0.96  |
| Austria          | 0.92                | 0.9   | 0.96    | 0.74  | 0.97                          | 0.93  | 0.99    | 0.51  |
| Netherlands      | 0.95                | 0.92  | 0.97    | 0.72  | 0.95                          | 0.82  | 0.97    | 0.23  |
| US               | 0.89                | 0.83  | 0.93    | 0.71  | 0.92                          | 0.9   | 0.93    | 0.80  |
| France           | 0.90                | 0.85  | 0.95    | 0.70  | 0.94                          | 0.87  | 0.97    | 0.74  |
| Finland          | 0.85                | 0.8   | 0.94    | 0.68  | 0.97                          | 0.95  | 0.99    | 0.92  |
| UK               | 0.86                | 0.86  | 0.90    | 0.65  | 0.98                          | 0.91  | 0.97    | 0.47  |
| W Germany        | 0.94                | 0.92  | 0.95    | 0.63  | 0.94                          | 0.86  | 0.98    | 0.36  |
| Hungary          | 0.75                | 0.76  | 0.86    | 0.63  | 0.86                          | 0.92  | 0.93    | 0.88  |
| Ireland          | 0.91                | 0.88  | 0.93    | 0.61  | 0.93                          | 0.86  | 0.96    | 0.51  |
| Israel           | 0.86                | 0.78  | 0.84    | 0.61  | 0.94                          | 0.83  | 0.97    | 0.75  |
| Australia        | 0.88                | 0.87  | 0.92    | 0.59  | 0.95                          | 0.87  | 0.97    | 0.51  |
| Luxembourg       | 0.98                | 0.92  | 0.98    | 0.57  | 0.99                          | 0.94  | 0.99    | 0.56  |
| Italy            | 0.92                | 0.75  | 0.95    | 0.51  | 0.97                          | 0.85  | 0.97    | 0.72  |
| Spain            | 0.93                | 0.73  | 0.95    | 0.48  | 0.95                          | 0.86  | 0.96    | 0.76  |
| Gender Ratio     | 1.04                |       | 1.40    |       | 1.06                          |       | 1.43    |       |
| Parenthood Ratio | .95                 | 1.25  |         |       | .97                           | 1.30  |         |       |