Cross-National Variation in the Influence of Employment on Child Care Time

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Abstract

Parental time investments in children are essential inputs in children's present and future well-being. The ability of parents to invest time in their children varies considerably, however, by employment status. It is also likely that the association of employment hours and time investments in children varies cross-nationally because of contextual differences in the everyday opportunities and constraints parents experience. We use nationally representative time diary data from the U.S., Canada, Australia, the U.K., France, the Netherlands, Norway, Sweden, and Slovenia to investigate how employment hours influence child care time, and whether some countries, such as the U.S., with high parental employment rates and lengthy hours in paid work, have a deficit in child care time. We find suggestive evidence that working "the American way" reduces child care time among employed mothers, but not fathers.

Time is a limited resource that both reflects and regulates social life. As such, women's and men's time use patterns carry implications about the value of specific activities and the constraints under which people fashion their days. Parental time investments in children are valued, rhetorically and behaviorally, because they are an essential input in children's present and future well-being. The ability of parents to invest time in their children varies considerably, however, by employment status. Because time is a finite resource, employment hours necessarily reduce time available for other activities, such as care of children. Although many parents feel that they spend too little time with their children, these perceptions are particularly strong among mothers and fathers with long work hours (Milkie et al. 2004). Long employment hours may also indirectly reduce parents' sleep and free time, sometimes to levels that are unhealthy for workers and their families, because parents strive to protect child investments by reallocating time from these activities to child care (Bianchi, Robinson, and Milkie 2006; Bittman and Wajcman 2000).

An expansive literature establishes that employed Americans spend long hours on the job relative to workers in other high-income countries (Gornick and Meyers 2003; Jacobs and Gerson 2004). Americans' long hours are especially evident when we compare annual hours (rather than weekly) and the proportion of workers with extremely long hours, for example, over 50 weekly hours (Gornick and Meyers 2003; Jacobs and Gornick 2002; Smeeding 2004). Employment hours are of serious concern for researchers studying how parent's care time affects children's, family, and individual well being. Long work hours limit time available for direct and supervisory caregiving and inadequate levels of care can place children at risk. Some research indicates that higher hours of maternal employment may be causally related with lower cognitive and emotional development in young children and higher propensities to engage in risky behavior among adolescents (Hill et al. 2005). Although mothers do not relinquish one hour of child care for each hour of employment, in the United States, employment depresses mothers' primary child care time by 4.9 hours per week, and all time with children by 16.5 hours, as compared with nonemployed mothers (Bianchi et al. 2006). Juggling multiple time burdens also has detrimental effects

on individual physical and mental health and increases marital strife (Jacobs and Gerson 2004; Rogers and Amato 2000).

Many researchers have called for reducing the number of hours American parents spend in paid employment, arguing that this would ease the time crunch for working parents (Jacobs and Gerson 2004; Williams 2000). Some scholars also suggest that it is appropriate for society to bear more of the costs of rearing children, because parental care of children produces social goods that benefit the public at large (England and Folbre 1999). Most research on the time crunch compares individuals within countries, but there is some evidence of a negative association across countries between employment hours and caregiving time (Gornick and Meyers 2003). Whether shorter hours in paid work necessarily translate into more time spent in caregiving, however, is an open empirical question. Much more work is needed on how systematic differences across countries may affect the association between work hours and time available for caregiving.

It is likely that the association of employment hours and time investments in children varies cross-nationally because of contextual differences in the everyday experiences of families. The opportunities and constraints parents experience in childrearing are shaped by micro-level factors as well as macro-level variation in welfare and work/family programs (Gornick and Meyers 2003; Van der Lippe and van Dijk 2002). In particular, the extent to which the state supports parental leave and early child care programs and regulates working time alters the environment in which parents make decisions about how to allocate time. Yet, our knowledge of whether and how the association of employment hours with parental time with children varies cross-nationally is limited. Most recent studies have focused on analyzing trends over time in parental time with children. These studies report that, on average, parents in Western industrialized nations appear to be spending more time in child care activities (Bittman 1999; Gauthier, Smeeding, and Furstenberg 2004; Sayer, Bianchi, and Robinson 2004). Additionally, the negative association between employment hours and child care time appears to have remained constant over time, despite increases in maternal employment in most countries. Studies have not yet examined

whether the relationship between employment and child care time differs across levels of employment hours and/or across countries.

In this study, we use time diary data from nine countries to assess first whether mothers and fathers child care time varies significantly across countries. We then assess the relative contributions of employment hours and demographic characteristics in explaining country differences in mothers' and fathers' child care time. The contrasts and similarities in levels of state support for families and children offer a useful arena in which to explore whether macro-level differences in the context in which children are reared translate into cross-national differences in how employment time and parental time with children are related.

Theoretical Perspectives on Parents' Time with Children

Parents are motivated to spend time with their children for a variety of reasons, ranging from an innate drive to invest time in offspring to ensure their survival and hence the survival of one's familial genetic line, to socializing children to prepare them to take their place in adult nonfamilial institutions, to maximizing family utility through sufficient time inputs in children which produce outputs of "high quality" children (Becker 1965; Coleman 1988; Fawcett 1983). Time use research on parents' child care patterns typically adopts the economic model of time use. This framework posits that households rationally and efficiently allocate time and money resources to optimize outputs, and thus utility. Specialization in certain types of activities is more efficient because it yields greater output, and women generally specialize in unpaid household labor and men in paid market labor because of human capital and biological differences which generate comparative advantages for each in their respective concentrations (Becker 1991). The economic perspective thus predicts that mothers should invest more time in children than fathers, but it also implies that specialization should vary across households depending on the level of each partners' comparative advantage.

A variant of the economic model is the "time availability" perspective that employment demands, particularly hours of paid work, affect how much time is "left over" for child care (Coverman 1985;

England and Farkas 1986). According to this perspective, employment reduces housework and child care because it sets parameters on time available for other activities (Coverman 1985). Studies provide strong support for the time availability perspective but also indicate the inverse association between employment hours and household work is typically stronger for women than for men (Sayer et al. 2004). In addition, some studies have found a negative association (Coverman and Sheley 1986; Ishii-Kuntz and Coltrane 1992; Yeung et al. 2001) or no association between men's employment hours and child care time (Pleck 1983). Although early studies in the U.S. found that fathers' child care time was not affected by wives' employment status, recent comparative work indicates that fathers do more child care when their wives are employed full-time and the effect is larger in states with higher aggregate levels of women's full-time employment (Hook 2006). Employment hours also indirectly reduce leisure and personal care time because parents sacrifice some time in these activities to maintain sufficient levels of time available for child care (Bianchi et al. 2006).

The availability of time for care work, and the cost of specializing in care work, are both embedded in gendered contexts. Women's and men's socialization, human capital investments, and attitudes about parenting and gender relations are influenced by historically and geographically specific cultural mores. The degree of specialization at the micro-level varies cross-nationally, because of different societal gender norms and policies and programs that promote or deter women's employment, regulate employment hours, and free some time from the market (Fuwa 2004; Gornick and Meyers 2003). It is plausible that the effect of employment hours on care work thus differs across countries because of these variations in macro-level contextual factors. Moreover, parents' demographic characteristics that are associated both with time in child care and time in employment also differ cross-nationally.

Cross-National Variation in Employment and Parenting Contexts

Parents' time allocation between employment and care work is affected both by micro-level characteristics, such as number and age of children, education, and family structure, and by macro-level factors. These factors differ extensively across countries, in part because of cultural orientations regarding

the appropriate interrelationship of family, market, and state (Esping-Andersen 1999; Orloff 1996; Sainsbury 1999). Societal norms about the appropriate roles and responsibilities of states, markets, and families are translated into overarching institutional frameworks of social provision that establish levels of and access to family and child allowances, maternity, paternity, and parental leave, publicly funded childcare, and educational systems (Gornick and Meyers 2003; Sainsbury 1999).

Gendered assumptions about how employment and care work should be divided between mothers and fathers are particularly salient in influencing welfare state variation in work/family policies. Policies regarding parental leave and child care subsidies can be designed to either reinforce gender differences, such that women specialize in caregiving and men in paid work, or to break down the gendered division of labor by pegging support to women's market work and men's care work (Gornick and Meyers 2003; Orloff 1996). The mutual feedback between policy and gender relations, as well as whether entitlements are granted on the basis of wage earning, caregiving, or earner/carer models, undoubtedly affects the amount of time mothers and fathers invest in employment and child care, the association of employment with child care, and the gender gap in child care between mothers and fathers.

In this analysis, we use nationally representative time diary data from nine industrialized countries to analyze the within and across-country association between time spent in paid work and child care. Countries included in the analysis are the United States, Canada, the United Kingdom, Australia, France, the Netherlands, Norway, Sweden, and Slovenia. We chose these comparison countries because they have diverse time-related outcomes, varied policy environments, and data on time use. They can also be grouped into distinct welfare state regimes (Castles and Mitchell 1993; Esping-Andersen 1999), with the U.S., Canada, the U.K., and Australia representing English-speaking market-oriented states; France and the Netherlands representing socially conservative Continental European states; Norway and Sweden representing socially egalitarian Nordic states; and Slovenia representing a new type of welfare state regime composed of transition economies that is basically a hybrid model incorporating both liberal and social-democratic elements. Variation across regimes in state support for paid maternity, paternity, and

parental leave, subsidized child care, and working time regulations, and their association with employment hour distributions, are of particular interest for this analysis.

English speaking (or liberal) welfare states are characterized by low levels of state support for maternal employment, child care programs and early childhood education. State programs are generally need-based and residual in nature, and the market provides the majority of family services, such as nonparental child care. Further, the gendered division of labor is thought of as an individual — not a state — concern. There are salient distinctions across English speaking countries, however, in the extent to which each conforms to the prototypical liberal ideology. The U.S. places the strongest emphasis on employment as the means for economic subsistence, whereas the other three states provide more income support for unmarried mothers and unemployed individuals (O'Connor, Orloff, and Shaver 1999). The countries also vary in levels of support for maternity, paternity, and parental leave, child care, and early childhood programs, with U.S. levels meager even in comparison to other English speaking countries (Gornick and Meyers 2003). In addition, the U.K. and Australia have historically promoted gender differences by instituting regulations and programs that encourage a strong male breadwinner, female caregiver model, whereas Canada and the US have tilted towards encouraging an earner-carer model. Welfare legislation enacted in the U.S. in 1996 framed care work as a barrier to employment barrier, instead of an appropriate reason to provide mothers with income support (O'Connor et al. 1999). The U.S. also has weak employment hours regulation and trade unions and limited options for quality part-time work. Canada has stronger regulations and bargaining units, but Australia and the U.K. historically and today have more extensive trade union coverage and work hour regulation.

Continental welfare states are characterized by the principle of subsidiarity, meaning social support is deemed a family or community responsibility rather than a state responsibility and entitlements to social assistance are linked to earnings and occupation. Strong norms that young children require in-home maternal care have resulted in modest maternity leave policies for employed mothers of young children, ranging from 12 to 16 weeks of leave at full pay. France offers long parental leaves, but at low wage replacement levels and parental leave is unpaid in the Netherlands. In addition, France provides no

paternity leave in France and the Netherlands offers only two days (Gornick and Meyers 2003). Continental countries have inclusive, accessible early childhood programs, but entitlements to this system exists only for children 2 and older. Both Continental countries have strong regulation over working time hours and caregivers are entitled to part-time employment. France has more supportive policies for employed mothers compared with English speaking countries, but these have emerged from state concern over declining fertility, not over concerns about increasing gender equality in employment or care giving (Windebank 2001).

Nordic welfare states are characterized by universal and comprehensive state-supported family programs, often created with an explicit goal of reducing gender differences in employment and caregiving. Entitlement programs are linked to social rights and family and child services are universal, providing cash benefits, paid and job-protected parental leaves, and child care. Nordic countries also have the most generous employment benefits for mothers, offering from 33 to 42 weeks of leave at full pay, albeit up to an earnings cap, and providing family leaves from one to three years with about 65% of wage replacement. Fathers' care work is promoted by offering specific benefits to them that are not transferable to mothers. These "use or lose" aspects of Nordic programs have increased the rate at which fathers take advantage of these benefits, but their take-up rate remain considerably lower than mothers (Gornick and Meyers 2003). Subsidized child care programs are widely available and accessible. Nordic countries also have more synchronicity between primary and secondary school hours and employment hours compared with Continental or English speaking states. They also provide stronger regulations over employment hours and part-time work for caregivers (in Sweden) that are explicitly motivated by desires to reduce tensions between workplace and family obligations "family-friendliness" of workplaces (Gornick and Meyers 2003).

Last, the Central and Eastern European transition economies are characterized by economic dislocations due to the shift from socialist to capitalist economies and a political heritage of high ideological support for maternal employment and publicly subsidized child care programs. However, state support for families was severely eroded during the transition to free-market economies (Gornick and

Meyers 2003). Family and child programs and services are now means-tested, and more limited maternity and parental leave programs offered, compared with Continental or Nordic countries. Levels of accessible child care and education programs remain high (United Nations Development Program 1996). Additionally, although limiting working time and promoting gender equality in employment and care were conditions for becoming a member of the European Union, lax enforcement of existing regulations and a glacial pace of instituting new regulations remain. For example, a 1996 United Nations Development report notes that some Slovenian mothers sign employment contracts that forbid them to take maternity leave.

An extensive literature documents that the welfare regime typology developed by Esping-Andersen (1990; 1999) does not correspond exactly to cross-national variation in gender inequality (see Orloff 1996; Sainsbury 1999). However, distinctions among welfare states generally reflect the extent to which policies and programs regulate working hours and promote or inhibit gender differentiated time allocation (Castles and Mitchell 1993; Gornick and Meyers 2003). Hence, the welfare regime framework offers an appropriate theoretical construct for this analysis.

In particular, parents' employment rates and work hour levels should vary across welfare regime types. To assess the extent of variation, Figures 1 and 2 show employment hour distributions of mothers (Figure 1) and fathers (Figure 2) ages 25 to 54 across the nine countries. Employment hours are grouped into 5 categories: zero (e.g. nonemployment); 1 to 14, or short part-time hours; 15 to 30, or long part-time hours; 31 to 40, short full-time hours; 41 to 50, long full-time hours; and 51 and more, very long full-time hours. Employment hours of Australian mothers and fathers are top coded as 49 or more, hence no Australian parents are included in the 51 or more category.

[Figures 1 and 2 here]

Looking first at mothers, about 40% of Canadian, Australian, and Dutch mothers are nonemployed, compared with 30% of mothers in the U.S., about 20% of mothers in Norway and Sweden, and only 17% of mothers in Slovenia (differences are significant at $p < .05$, results not shown). Mothers in transition economies, such as Slovenia, typically have higher employment rates compared with

European mothers because of the legacy of socialist ideology and the contours of transition economies (Fagan et al. 2005). A much larger proportion of mothers in the U.K., Australia, and the Netherlands work short part-time hours, compared with mothers in other countries, in line with the higher availability of this type of part-time job in those countries. A higher proportion of British, Australian, and Dutch mothers also work 15 to 30 hours per week, and Norwegian mothers are also more likely to work long part-time hours compared with American, Canadian, French, Swedish, and Slovenian mothers. The latter suggests that Norway's employment context promotes mothers' full labor force inclusion more so than the context in the U.K., Australian and the Netherlands.

What is most striking about Figure 1, however, is the relatively high proportion of U.S., Canadian, British, and Slovenian mothers who work 41 or more hours per week. For example, in the U.S., 13% of mothers work long full-time hours compared with only 3% of French mothers and 6% of Norwegian mothers. Further, very long hours (51 or more) are worked by 4% of U.S., Canadian, and British, and 6% of Slovenian mothers. Estimates shown in Figure 1 correspond well with comparative research on mothers' employment rates and hours. In addition, results not shown indicate that the pattern of country-level variation in mothers' employment rates and hours is similar comparisons are limited to mothers with children under 5. The higher employment rates and lower part-time employment of mothers in the U.S., Canada, and Slovenia likely reflect the higher "cost" of part-time employment, such as lower hourly wages and no or limited benefits.

Figure 2 indicates that long work hours are also more common among fathers in the U.S., Canada, and the U.K., compared with fathers in Continental and Nordic countries. For example, 21% of U.S. fathers work 51 hours or more hours per week, and 26% of British fathers, compared with only 1% of French fathers and 12% of Norwegian and Swedish fathers. Further, the distribution of fathers between short full-time hours (31 to 40 per week) and long full-time hours (41 to 50) differs. Significantly larger proportions of fathers in English speaking countries work long full-time hours, whereas more fathers in Continental and Nordic countries, as well as Slovenia, work short full-time hours. Rates of

nonemployment also differ substantially (and significantly) among fathers, ranging from lows of 4% in Slovenia and 6% in Sweden, to highs of 12% in France and 16% in Canada.

Across industrialized countries, it is no longer as common for women to leave the labor force when they become mothers, because their increased education and high divorce rates have raised the opportunity costs of foregoing employment. Figures 1 and 2 suggest, however, that more expansive parental leave programs and/or entrenched norms that children should be cared for at home by their mothers, lower the costs of foregoing or limiting employment in some countries. Likewise, longer employment hours among mothers and fathers suggest that parents' choices about working long hours may be more constrained in some countries, because of more limited regulations on maximum work hours. Over 50% of U.S. workers indicate some work/life conflict because of rigid employment hours, whereas only 20% of European Union parents report similar issues (Gornick and Meyers 2003). This suggests that parents in countries other than the U.S. have a different set of employment options from which to choose.

Cross-national differences in child care time, as well as employment rates and hours of mothers and fathers, are also influenced by demographic characteristics, not just by state policies and programs. Second demographic transition trends, specifically delays in getting married and having children, increases in cohabitation, divorce, and nonmarital childbearing, increased educational attainment, and surges in maternal employment, have occurred across most industrialized countries, although initial levels and the pace of change varies widely (Lesthaeghe 1995; McLanahan 2004). Assessing the relative role of employment and other demographic factors in influencing cross-national differences in mothers' and fathers' child care time is the issue to which we now turn our attention.

Data and Method

Data are from the 2003 American Time Use Study (ATUS) and surveys collected in the late 1990s and early 2000s archived in the Multinational Time Use Study (MTUS). The ATUS is the first federally administered time diary survey in the United States and was designed to collect nationally

representative data on how adults allocate time to paid work, unpaid work, self care, and leisure (Bureau of Labor Statistics and U.S.Census Bureau 2004). The ATUS sample consists of all noninstitutionalized U.S. residents age 15 and over and is drawn from outgoing rotations of the Current Population Survey. In 2003, the response rate was 57% yielding a sample size of 20,720. The Multinational Time Use Study (MTUS) provides harmonized data files on time spent in paid work, unpaid work (including family caregiving and domestic work), personal care (including sleep), and leisure, with further disaggregations available in each of these categories. We use the following MTUS surveys in this analysis: Canada 1998, United Kingdom 2000, Australia 1997, France 1998, the Netherlands 2000, Norway 2000, Sweden 2001, and Slovenia 2000. Response rates and sample sizes, respectively, are 78% and 10,749 in Canada, 45% and 11,667 in the United Kingdom, 72% and 7,246 in Australia; 88% and 15,441 in France; 25% and 1,813 in the Netherlands, 50% and 3,211 in Norway; 50% and 3,976 in Sweden; and 53% and 4,500 in Slovenia.

The time diaries were administered using different methods across countries. Australia, France, the Netherlands, Norway, Slovenia, Sweden, and the U.K. use time diaries with fixed-time intervals, which range from 5 to 15 minutes, whereas Canada and the U.S. use time diaries with free time intervals. Respondents who fill out fixed-time interval diaries account for their activities during specific blocks of time across a 24 hour period whereas those responding to diaries with free intervals provide the specific start and end time of all activities across a 24 hour period. Additionally, the Netherlands collects data over a one month period, and Australia over an eight month period, whereas the other countries collect data over a 12 month period. Respondents in the U.S. and Canada recall activities on the day prior to the administration of the survey; respondents in other countries complete the diary on the day of survey administration. Australia, France, Norway, Slovenia, and the U.K. collect diaries from all members of the household (with some age restrictions for children); Canada, the Netherlands, Sweden, and the U.S. do not. Methodological differences in sample design and survey administration raise the possibility that data are not entirely comparable across countries and scholars differ in their interpretation of whether these differences compromise conclusions about country-level differences in time use (Folbre et al. 2005;

Gershuny 2000). In general, methodological studies indicate that recall diaries (such as those used in Canada and the U.S.) underreport activities of short duration and hence brief periods of child care may be missed. However, estimates of activities that occur on a routine basis, such as most child care, have been found to have high validity across different types of survey instruments and methodologies (Juster 1999). Further, there is no indication that methodological differences vary systematically by parental employment hours. Hence, we are reasonably confident that methodological differences are not a source of significant bias. Additional technical details on sample populations and survey administration across the various countries are available online at the MTUS data archives http://www.timeuse.org.

We limit our sample to mothers and fathers ages 25 to 54, the prime working ages, because of our focus on the association between employment hours and child care time. The data are from individual mothers and fathers not from married parents. Ideally, we would like to have data on couples' allocations of time in order to model the joint decision making that takes place regarding the division of time between employment and child care, as well as other household labor, personal care, and leisure. Couples negotiate over who will allocate more time to nonmarket activities and who will allocate more time to market activities and their time allocations undoubtedly exert mutual influence. In this analysis, we use cross-sectional data from nine countries, only two of which have publicly available data on spouses' time allocations. Consequently, our modeling strategy is to assess the strength of association between employment hours and time in child care. Although data limitations impose restrictions on our ability to develop causal models of time allocations, recent U.S. research on married couples' time allocations suggests this limitation may be minor because, at least in the U.S., there appear to be limited tradeoffs of parental child care time: the more time mothers spend with children the more time fathers spend with children (Aldous, Mulligan, and Bjarnason 1998; Yeung and Stafford 2003).

We focus on two kinds of comparisons using the time use data. First, within each country we examine the relationship between reported paid work hours and child care time. Second, we compare across countries to determine whether some, such as the U.S., with high parental employment rates and lengthy hours in paid work have a deficit in child care time. Is the amount of parental child care lower in

countries that place heavy emphasis on maternal and paternal employment? The answer cannot be inferred from examining work and caregiving within a single country, but must be answered by comparing patterns of work and care across countries, some of which have low rates of parental employment and others which combine high rates of parental employment with low weekly hours among typical working parents. Our assessment will reveal the extent to which the U.S. is unique in its combination of high rates of parental employment with high weekly hours of work to isolate the effects of working "the American way" on parents' child care time.

Conceptual and Methodological Issues in Measuring Child Care Time

Time diary surveys are "activity-based" instruments, meaning individuals report what they were doing and when activities began and ended, across a 24 hour period. Most studies using time diary data to examine parents' time with children assess time in "primary" activities. We do likewise, using a constructed measure in the MTUS data of summed minutes per day in child care activities, which we convert into hours per week by multiplying by seven (ATUS respondent child care activities are coded to correspond with the available MTUS measure). Activities coded as child care include feeding, bathing, dressing, putting to sleep and waking up infants and young children, reading to and playing with children, helping children with their homework, teaching them how to do an activity, providing medical care to children, and general supervision. The MTUS harmonized primary child care time variable does not include time spent driving children places, unlike most published estimates of primary child care time.

Although time diaries are a valid and reliable approach to measuring time in specific activities, the method is limited in assessing the full extent of parents' time investments in children in three important ways (Budig and Folbre 2004; Folbre et al. 2005; Folbre and Yoon 2005). First, the time parents spend monitoring or being available to children is not assessed (the 2003-2005 ATUS surveys collect time children are "in parents' care" but we do not include that measure here because it is not available in other countries). "On-call" time is extensive, because many parents feel that good parenting requires round-the-clock attention. Thus parents' time available for other activities is more constrained than measures of primary time alone would indicate. Second, parents' time in activities that are done for

children, but not necessarily with children, are not always distinguishable in time diary surveys. For example, making a phone call to a child's teacher to check on grades, or researching quality differences across child care providers, may not be coded as "child care." Last, the time parents' spend combining a primary activity with a child care activity (e.g. a secondary activity) is measured inconsistently across countries. Some surveys do not ask respondents to report secondary activities and, among countries that do collect this information, specific instructions and examples differ in ways that appear to affect parents' reporting. All three limitations on primary child care time result in underestimates of parents' total time investments in children and do not allow assessments of differences in the quality of time. There is no indication, however, that these data limitations vary systematically across countries by parental employment.

Hence, despite its limitations, we use a measure of primary child care time in this analysis because it is the only measure available cross-nationally. We refer to this measure as "child care time" for simplicity, but are well aware that it does not reflect the totality of parental time investments in children. Although preferable in terms of reducing measurement error (Folbre and Yoon 2005), we are not able to disaggregate primary child care time into developmental activities and routine care activities, because these measures are not included in the publicly available MTUS data. We are confident, however, that assessing cross-national differences in how employment hours influence parents' time in primary child care is useful because this time reflects parental investments in activities that are tied directly to children's cognitive and psychological development (Budig and Folbre 2004; Hofferth and Sandberg 2001).

Measures

The central independent variable for this analysis is parental employment hours. Employment hours are based on a recall question included in the demographic survey about usual hours of paid employment. We distinguish work hours into five categories. For mothers, the categories are zero, 1 to 14; 15 to 30; 31 to 40; and 41 and higher; for fathers, the categories are zero, 1 to 30, 31 to 40, 41 to 50, and 51 and higher. There are not enough mothers in all countries who work 51 hours or more to include this as a separate category (see Appendix Table 1), nor are there enough fathers in all countries who work

part-time hours to differentiate between short and long part-time hours (see Appendix Table 2). Additionally, work hour data from the 1997 Australian time diary survey are top coded at 49, which prevents us from distinguishing Australian fathers who work 41 to 50 hours from those who work 51 or more hours per week.

Our analysis strategy consists of assessing within- and between-country differences in the direction and magnitude of the association between employment hours and mothers' and fathers' primary child care time. We first assess cross-national differences in the bivariate association of employment hours and mothers' and fathers' child care time. Next, we estimate a series of OLS regressions to model the influence of employment hour levels on child care time, net of demographic characteristics. We use OLS models because recent investigations suggest that the use of tobit regressions is not appropriate for the analysis of time use data (Stewart 2006). We then conduct a series of decompositions, in which we estimate counterfactual predictions of Canadian, Australian and European mothers' and fathers' child care time, as if they had U.S. mothers' and fathers' employment and demographic rates and assuming that the effect of covariates (e.g. their slopes) remain as observed. We also estimate counterfactual predictions of U.S. mothers' and fathers' child care time, using the employment hour rates and demographic rates of Canadian, Australian and European mothers and fathers, and assuming the effect of U.S. covariates remain as observed. This allows us to decompose the across-country differences in child care time into the portion attributable to country differences in employment and demographic rates and the portion attributable to country differences in the effects of covariates.

Our analyses do not correct for potential endogeneity between employment hours and child care time. Although common in econometric analyses, the use of instruments to correct for potential endogeneity is rare in time use studies (Craig 2006), in part because the limited covariates available in harmonized surveys such as the MTUS. Although economic theory assumes that decisions about time allocated to employment and household labor are determined simultaneously, sociological work suggests that societal values and norms that influence expectations about how women and men spend time, as well as the priority accorded to employment in capitalist societies and employment discrimination, all

constrain individual choices about hours of employment (Nock and Kingston 1989). Further, women and men may have the ability to determine whether they will be employed or not, and perhaps part-time or full-time, but do not in most cases have the ability to set more finely specific hours of employment (Folbre 2004).

Demographic characteristics in the multivariate regressions and decompositions include those known to be associated with parents' child care time and available in all surveys. These measures are presence of children under 5, number of children, household type, and parental education and age. The presence of children under 5 is a dichotomous measure indicating the age of the youngest child in the respondent's household. The under 5 threshold does not match the age at which children in all countries enter school but is the only indicator of young children available in the data. Number of children is a continuous measure of the total number of children under 18 in the household. Children may or may not be the biological children of the respondent. Having young children and more children are the key determinants of parents' child care time, and effects are typically larger than parental demographic and socioeconomic characteristics.

Our measure of household type is a combination of marital status and living arrangements. We first code parents as married or single (cohabiting parents are coded as married as is the convention in Europe and Australia). We then construct a four category measure of household type based on the presence of other adults in the household: married parents, living with no other adults (the omitted category in regressions); married parents, living with other adults; single parents, living with no other adults, and single parents, living with other adults. Among fathers, we use a three category measure, because there are too few single parent fathers to distinguish them by the presence of other adults. The effect of other adults in the household on parents' child care time is inconclusive. Other adults may reduce the demand on parents to engage in child care, by substituting their own care time; or they may reduce employment time demands on mothers or fathers by contributing employment income to the household.

Educational level is harmonized across countries into three categories based on the International Classification of Education: low education, which corresponds with uncompleted or less secondary education and/or not completing ISCED level 3; medium education, which corresponds with completed secondary and/or completing ISCED level 3, or attendance at ISCED level 4; and high education (the omitted group in regressions), which corresponds with above secondary education, or ISCED level 5 and above. The small amount of missing data is recoded into the medium education category (there are .08 missing responses in the Canadian data, .01 in the Norwegian, and .01 in the Swedish data). Including flags for missing education or deleting respondents with missing education data produce similar results. More highly educated parents spend more time in child care activities compared to less educated parents, perhaps because they are more aware of the positive developmental outcomes associated with higher time investments. The positive relationship between education and child care time is not always significant across countries, however.

Respondent's age is classified into six categories to reflect life course stages: 25 to 29 (the omitted group in the regressions), 30 to 34, 35 to 39, 40 to 44, 45 to 49, and 50 to 54. The effect of parental age on child care time is inconclusive, with studies reporting either a positive association or no association. Parents who are older may have delayed parenting and thus be less likely to have become a parent from an unintended birth. This may signal increased propensity to spend time with children. But, older parents also typically have more competing demands on their time, particularly from employment, and thus may have less available time for child care. They may also have older children, who require less care.

Results

We begin by examining how mothers' and fathers' primary child care time varies by country and whether the pattern of variation appears to be similar when we compare parents at comparable levels of employment. Figures 3 and 4 show how mothers' and fathers' average hours per week in primary child

care time vary across countries. Values and significance tests are shown in the last row of Tables 1 (mothers) and 2 (fathers).

[Figures 3 and 4 here]

Figure 3 reveals two findings of interest. First, when employment differences are not considered, the U.S. does not appear to experience a care deficit. American mothers spend 11.4 hours per week in child care activities, slightly lower but not significantly than the 11.7 hours of Australian mothers, and significantly higher than child care time among mothers in Continental and Nordic countries and in Slovenia. Second, mothers' child care time varies both within and across welfare state regimes. Among the English speaking countries shown in the first 4 bars of Figure 1, child care time is highest among U.S. and Australian mothers, about one hour more than Canadian mothers (although the difference is not significant) and almost 3 hours more than British mothers. In the Continental countries, French mothers invest only 7 hours per week in child care, almost 2 hours less than Dutch mothers (again, difference is not significant). Comparing the Nordic countries, Swedish mother spend 2.6 fewer hours per week in child care activities compared with Norwegian mothers. Across regimes, mothers' child care time is lowest among French, Slovenian, and Swedish mothers, and highest among U.S. and Australian mothers. At first blush, then, child care time does not appear to be lower in countries that emphasize maternal employment, but instead is lower in the more "family-friendly" countries.

Figure 5, which shows fathers' child care hours per week by country, reveals a somewhat similar pattern across regimes. North American fathers spend more time in child care compared with Continental, Swedish, and Slovenian fathers. There is substantial within-regime variation in the English speaking and Continental countries, however, suggesting substantial demographic and behavioral effects on child care time that do not correlate with regime type. Among fathers in the English speaking countries, U.S. and Canadian fathers report 5 hours 40 minutes in child care, almost 2 hours more than British fathers and 1 hour more than Australian fathers (differences are significant). Dutch fathers spend over twice as much time in child care as French fathers: 4.4 hours versus 2 hours. In contrast, differences in child care time of

Nordic fathers are small and not significant, with Norwegian and Swedish fathers devoting about 5 hours per week to child care activities.

Among fathers, the overall pattern of macro-level variation corresponds roughly with the degree of gender differentiation across welfare states. For example, fathers' child care time is highest in the U.S. and Norway, both of which feature a commitment to gender similarity in employment outcomes (albeit with different state level orientations to gender similarity in nonmarket care outcomes), and lowest in France, which favors a more gender differentiated division of labor. Not surprisingly, mothers' time in child care is substantially higher than fathers' child care in all countries. Still, the ratio of mothers' child care time to fathers' time (results not shown) ranges from about 2 times higher in the U.S., Canada, the U.K., the Netherlands, Norway, and Sweden, to around 2.5 times higher in Australia and Slovenia, and 3.5 times higher in France.

As shown earlier, however, employment rates and hours vary considerably across countries. Hence, we now turn to an assessment of whether cross-national variation in child care time is similar when we compare mothers and fathers with similar levels of employment. Tables 1 and 2 show how mothers' and fathers' weekly child care hours vary by employment hour category and country. Significant differences across countries within each employment hour category are indicated by comparing superscripts of the countries. Countries that have the same superscripted letter are not significantly different; countries that do not share a superscripted letter are significantly different. For example, looking at the row that gives estimates for nonemployed mothers, the child care time of U.S., Canadian, and Australian mothers is not significantly different, as indicated by the same superscripted letter in their respective columns (e.g. an ^{a}). In contrast, the child care time of nonemployed American and Australian mothers is significantly different than Norwegian mothers' child care time, as indicated by the lack of a shared superscripted letter in the respective country columns. Significance tests of within country differences across the employment hour categories are not shown but are noted in the text.

[Tables 1 and 2 here]

Table 1 has two key findings. First, mothers with higher employment hours spend less time in child care activities, but the relationship is not significant in the Netherlands, Norway or Slovenia, even at the bivariate level. Second, the pattern of association varies significantly across countries. Comparing mothers who are nonemployed and those who work short part time hours (14 or less), variation in child care time across regime type is similar to the pattern among all mothers just described. Specifically, U.S. and Australian mothers spend significantly more time in child care compared with mothers in most other countries. For example, nonemployed U.S. mothers devote 16 hours per week to child care, compared with a low of 8.1 hours among nonemployed Slovenian mothers. Further, nonemployed U.S. and Australian mothers devote 4 hours more to child care activities than Nordic mothers, and between 6 to 7 more hours than Continental country mothers. Among mothers employed short part-time hours, excepting the U.K., English speaking mothers spend between 2 to 3 times longer in child care compared with French mothers. Among mothers who work long part time hours, the only significant difference in child care time is found between the U.S. and other countries: American mothers employed in long part-time hour jobs devote 12.2 hours to child care, 3 hours more than Australian, Slovenian, and Norwegian mothers, and about 4 hours more than British, Dutch and Swedish mothers.

The U.S. child care premium shrinks however, when the comparison group is mothers who work full-time hours. Norwegian mothers who work long full-time hours devote the highest amount of time to child care activities: 10.5 hours per week, compared with 8 hours among U.S. and Canadian mothers (difference is not significant), and between 5 and 6 hours in the remaining countries (difference is significant). Comparing across employment categories of Norwegian mothers, child care time declines only 1.5 hours per week, a nonsignificant difference, whereas in the U.S., mothers' child care time plummets a significant 8 hours, as employment increases from zero hours to 41 or more hours.

Table 2 shows similar estimates of fathers' weekly child care hours by employment hour category and country. At each level of employment, differences across countries are similar to those shown in Figure 5 for all fathers. No doubt this reflects the lower variation in employment hours among fathers. Consequently, what stands out from Table 2 is the lower investments in child care time among French

and Slovenian fathers, within each work hour category, in comparison with English speaking, Nordic, and Dutch fathers. For example, among fathers who work short full-time hours, French fathers devote 2 hours per week to child care, about 2 hours less than fathers in the U.K., Australia, the Netherlands, and Sweden, and about 3 hours less than fathers in the U.S., Canada, and Norway. Further, this is substantially less time than the almost 6 hours in child care activities for U.S. and Canadian fathers who work 51 or more hours.

In sum, at the descriptive level, the results indicate that mothers' child care time may be more strongly influenced by employment levels and hours in English speaking countries compared with Continental and Nordic countries, and Slovenia. The evidence about whether care time is lower in countries that emphasize maternal employment is mixed. American, Canadian, and Norwegian mothers have higher child care hours than mothers in other countries, and these countries feature relatively high rates of full-time employment. Nonetheless, the bivariate results are suggestive that employed mothers' child care time is reduced much less in countries that provide "family-friendly" benefits in addition to emphasizing maternal employment, such as Norway, compared with those that provide fewer supports for employed mothers, such as the U.S. and Canada. Among fathers, however, the descriptive results offer no indication that an emphasis on paternal employment, in particular long work hours, results in a care deficit. Indeed, the low child care hours of French fathers, who have strong regulatory protection against long employment hours, suggest just the opposite. The descriptive results do not account for demographic differences across countries, however, and these are important to consider before drawing firm conclusions.

The initial level of demographic characteristics and the rate at which they have changed in response to cultural and economic factors linked with the second demographic transition vary across countries (Gauthier et al. 2004). For example, in the early 2000s, the period fertility rate was among the "lowest-low" in Slovenia (at 1.26), which experienced a sharp drop in births immediately following its political and economic transitions. In contrast, fertility rates are relatively high in Norway, the Netherlands, France, and the U.S., because of high immigrant fertility in the U.S., and maternalist policies

in the other 3 countries. Further, in Canada and Norway about 45% of women from the 1960 birth cohort, and in Slovenia close to 70% of women, had a child by age 25, whereas women in other countries typically delay motherhood longer (Billari 2004; Gauthier et al. 2004). At the macro-level, higher fertility levels have been historically correlated with lower levels of women's employment, although emerging evidence suggests this association is switching direction among recent cohorts (Kohler, Billari, and Ortega 2002). Research is more conclusive on the effects of delayed transitions to motherhood, with longer delays strengthening labor force attachment. Nonmarital child bearing has increased in most industrialized countries, but the institutionalization of cohabitation as a de-facto marital union means the proportion of children living with only one parent is smaller in Nordic countries compared to English-speaking countries, where cohabiting unions are more transient (Heuveline and Timberlake 2004). Further, competing tensions between employment and care time vary by the extent of state support for single mothers. In English speaking countries, married mothers have more ability than single mothers to withdraw from the labor force, or work fewer hours, because they can rely on financial support from their husbands. In contrast, in Continental and Nordic countries, state support allows sole parents the option to specialize in care work or achieve more balance between paid work and caregiving, by subsidizing high quality child care and /or high quality part-time employment, options not available in liberal countries to the same extent. Last, the proportion of adults sharing households with other adults is relatively high in Slovenia and the U.S., both of which have high housing costs. Other adults in the household, particularly grandmothers, may pitch in with caregiving responsibilities.

In multivariate results presented next, we assess whether a significant association between employment hours and child care time remains, once we account for salient demographic characteristics. Table 3 presents OLS coefficients of the influence of employment hours on mothers' child care time, net of the effects of presence of young children, number of children, household type, and parental education and age. Regressions are estimated separately for each country. Table 4 presents a similar series of regressions for fathers.

[Tables 3 and 4 here]

Table 3 indicates that employment hours reduce mothers' child care time, even controlling for demographic characteristics. Further, country differences in the association between employment hours and child care time remain when demographic controls are introduced. Nonemployed mothers spend more time in primary child care activities compared with mothers who work long full-time hours in all countries, except Norway, where the association of employment and child care time remains nonsignificant. The extent to which nonemployed mothers spend more time in child care is greater in two of the English speaking countries —6.3 hours in the U.S. and 8.5 hours in Australia—compared with only 2.1 to 2.6 hours in the Netherlands, Sweden, and Slovenia. Additionally, in the Continental and Nordic countries, as well as Slovenia, mothers' child care time is affected more by employment per se, as indicated by the lack of significant differences in child care time between mothers who work part-time and those who work full-time hours (both short and long). This suggests that policies and programs with objectives of fostering either maternal care of young children, as in France and the Netherlands, or those facilitating more gender egalitarian work and care allocations, as in Sweden, may buffer the negative association of employment hours with care time. In contrast, in the English speaking countries, employment and hours both matter, although differently across countries. In the U.S. and the U.K., mothers who are nonemployed and those employed part-time (both short and long hours) spend significantly more time in child care activities than mothers employed 41 or more hours. There is no significant difference in child care time, however, between mothers who work short and those who work long full-time hours. In Canada, mothers who work short part-time hours spend more time in child care compared to those who work 41 or longer hours, but there are no significant differences between mothers in long part-time hour jobs, and those working short full-time hours, compared to mothers working long full-time hours. In Australia, all mothers who work 40 or fewer hours per week spend more time in child care compared to mothers who work long full-time hours. As discussed earlier, there are substantial differences across the English speaking countries in the availability and take up of high-quality part-time employment, as well as family leave policies and work hour regulations. The pattern of variation in the association between employment hours and child care time in the English speaking countries suggests that

the option of reducing work hours as a way to combine employment and care may be more attractive or feasible for Canadian and British mothers than for American or Australian mothers.

The effect of demographic characteristics is similar to findings documented in the literature. The presence of children under 5 increases mothers' child care time, and in the U.S., France, Norway, and Slovenia, each additional child also adds time in primary child care activities. Further, results not shown indicate that the association of employment hours within and across countries is similar comparing only mothers of children under 5, who experience the greatest demand for direct child care time. Having other adults in the household reduces married and single mothers' child care time, relative to married couples who live with no additional adults, suggesting that other adults substitute their time in care activities for some of mothers' time. In all countries, less educated mothers spend less time in child care activities compared with more educated mothers, which may signal that behavioral inclinations among well-educated mothers to produce higher quality children through higher investments of time and money are widespread. Mothers who are older spend less time in child care activities, compared to mothers ages 25 to 29, with the exception of the Netherlands where age is not significantly associated with child care time. The pattern of the age effect across countries suggests that it may be related to developmental processes among children as well as greater demands for older parents' time. Models do not control directly for age of all children, and thus some of the effect of mother's age may be due to having older children who require less time in direct child care activities (although they still require substantial supervisory and on-call maternal time).

Turning to the regressions of fathers' child care time shown in Table 5, the results indicate that fathers' time in child care is not as responsive to employment hours, in comparison with mothers' time. Being nonemployed increases child care time by about 3 hours per week relative to working long full-time hours in the U.S., the U.K., Australia, and Norway. Fathers who work 30 or fewer hours also spend about 2 hours more time in child care compared with fathers who work 51 or more hours in the U.K., Australia (where the comparison is 41 or more hours), and Sweden. In contrast, employment itself and

level of employment hours have no association with fathers' child care time in Canada, France, the Netherlands, and Slovenia.

Fathers' time is somewhat more responsive to demographic factors across countries and effects correspond to those found in prior research. Young children increase all fathers' child care time and having more children increases fathers' time in the U.S., the Netherlands, Norway, and Sweden. Other adults in the household decrease fathers' child care time in Canada, the U.K., Australia, Sweden, and Slovenia, but not in the U.S. (contrary to the negative significant association found for U.S. mothers' child care time). Less educated fathers spend less time in child care activities than more educated fathers, excepting British and Norwegian fathers. Last, the effect of age varies across countries, with fathers 30 to 34 spending more time in child care compared to fathers 25 to 29 in the U.S., France, and the Netherlands, but there is no significant effect for other age groups. In contrast, older fathers spend less time in child care activities in Australia and Slovenia and age has no association with fathers' child care time in Canada, the U.K., Norway or Sweden. Across countries, then, fathers' child care time responds to increased demands for care, as indicated by positive coefficients for young children and number of children, as well as paternal age, and also responds to increased supply of other caregivers, as indicated by the presence of other adults. The negative effects of less education on fathers' child care time suggest that higher propensities to invest time in children may be widespread among well-educated fathers, as well as mothers.

Nonetheless, variation in the limited association of fathers' employment with child care time does not correspond well with welfare regime type. This finding, along with the weak explanatory power of the regressions (with R^2 values ranging from 9 to 21, with the .39 for the Netherlands as an outlier), suggests that employment and compositional characteristics, along with macro-level factors, are perhaps a small part of the story in explaining why some fathers spend more time in child care than others. In next steps, we plan to estimate regressions for married fathers only, to determine whether adding wives' characteristics increases explanatory power of the models.

In sum, the regression results provide suggestive evidence that employment hours are associated with a greater reduction in child care time among mothers in some English speaking countries, but not for mothers in Continental, Nordic, or transition economy countries. Among fathers, however, employment hours have a weaker influence on child care time in English speaking and Nordic countries, and no association in Continental countries and Slovenia.

The regressions are limited in their ability to assess the relative influence of employment hours and other compositional factors in explaining cross-national differences in mothers' and fathers' child care time. To address this issue, the last step of our analysis presents results from two series of regression decompositions, in which the cross-national difference in child care hours is separated into a proportion explained by differences in composition (i.e. differences in observed employment and sample characteristics) and a proportion explained by differences in behavior (i.e., differences in estimated coefficients or slopes). Decompositions are estimated using the following equation:

$$\text{Predicted Hours Country}_1 - \text{Predicted Hours Country}_2 = \text{Y}(B_{C1}{*}X_{C1} - B_{C1}{*}X_{C2}) + \text{Y}(B_{C1}{*}X_{C2} - B_{C2}{*}X_{C2})$$

The first term on the right hand side of the equation represents the change in mothers' predicted mean child care hours between country 1 and country 2 due to differences in sample characteristics in each country; the second term on the right-hand side of the equation represents the change in mothers' predicted child care time due to differences in the effect of estimated coefficients at each time point (thus represented nonstructural behavioral differences). Decompositions can be calculated using rates from each country as weights. Because our focus is on whether the configuration of U.S. employment rates and hours results in a care deficit, we first decompose the difference in predicted child care hours between American parents and parents in the other 8 countries (separately for mothers and fathers), using U.S. rates as weights. We then decompose the difference in predicted child care hours, using the other 8 country rates as weights. Our discussion focuses on the portion explained by ethnic group differences in means on child care time. This strategy allows us to present two counterfactuals about mothers' and fathers' child care time. The first counterfactual, presented in Table 5, predicts how the child care hours of non-U.S. mothers and fathers would change, were they to have the employment and compositional

characteristics of U.S. mothers and fathers combined with their own country-specific behavior. The second counterfactual, presented in Table 6, predicts how the child care hours of U.S. mothers and fathers would change, were they to have the employment and compositional characteristics of mothers and fathers in each of the other 8 countries, combined with U.S. specific behavior. Because results are similar when U.S. rates are used as weights and when other country rates are used as weights, we limit our discussion to results presented in Table 5.

[Tables 5 and 6 here]

The decompositions of country-difference in mothers' child care hours, shown in the top panel of Table 5, indicate substantial variation in the extent to which compositional factors explain dissimilar child care time investments. The percentage explained by country differences in employment and demographic means ranges from 1% in France to well over 100% in Australia (indicating that coefficient differences are more than offsetting compositional differences). Considering employment alone (allowing other demographic factors to remain at own country rates), mothers' child care hours in English speaking and Continental countries would decline, whereas child care hours would increase in Nordic countries and Slovenia, if these mothers had the employment profile of U.S. mothers. The extent to which employment alone accounts for dissimilarities varies across the countries. For example, dissimilarities in mean employment rates between Canadian and U.S. mothers account for 54% of the overall country-difference in child care hours. In France, however, differences in employment rates account for only a modest 5% of the gap. Countries in which employment explains a larger proportion of the difference in predicted child care hours are those which have lower rates of employment and shorter employment hours compared with U.S. mothers. In contrast, in the two countries where employment accounts for far less, British mothers have similar nonemployment rates but work shorter hours whereas French mothers have higher nonemployment rates but, when employed, have similar hours. This suggests that it is the combination of dissimilarities in employment rates and hours that is affecting the child care gap. In addition, although Norwegian mothers' child care time would increase if they had the employment profile of U.S. mothers, about 46% of the gap is due to divergent employment rates and hours between the two countries. Swedish

and Slovenian mothers' child care time would also increase if they had the employment means of U.S. mothers, but employment accounts for only 8% and 3% respectively of the gap. Again, Norwegian mothers differ from U.S. mothers in terms of both higher employment rates and greater concentration in jobs with shorter hours, whereas differences in Sweden and Slovenia are concentrated in higher employment rates.

Country dissimilarities in other demographic characteristics, particularly presence of young children and education, account for a larger proportion of child care hour differences in the U.K., Norway, and Slovenia, compared to the employment portion in these countries. For example, if mothers in the U.K. kept their own employment rates but had the demographic characteristics of U.S. mothers, their child care time would increase by 1.3 hours (and explain 44% of the child care gap between the two countries). The upward pressure on child care time exerted when U.S mothers' demographic characteristics are applied in the U.K., Australia, and Slovenia is due primarily to higher educational attainment in the U.S., whereas the downward pressure exerted by demographic differences in the Netherlands and Norway is due to the lower proportion of young children in U.S. households.

In sum, the offsetting influences of employment and demographic dissimilarities observed in the U.K., Australia, France, and Norway, the cumulative downward influence in Canada and the Netherlands, and the positive influence in Sweden and Slovenia all suggest that the U.S. is exceptional in the extent to which high employment rates and hours are emphasized and mothers' demographic characteristics are those which increase demand for child care time. In the other 8 countries, demographic characteristics that ratchet up demand for child care time are present in countries in which maternal employment of young children is discouraged (as in France and the Netherlands) or quality part-time employment is emphasized (as in Sweden). Nonetheless, the combination of employment and demographic differences account for less than one-third of the substantial difference in child care hours, comparing U.S. mothers, with mothers in the U.K., France (where only 1% is accounted for), and Sweden. Hence, a useful extension to this analysis which we plan to explore next is the role played by institutional and micro-level behavioral differences across countries.

Among fathers, as expected, compositional factors have a relatively larger influence on child care time than employment differences (with the exception of Canada, which has a similar demographic profile to the U.S., and a very small difference to be explained). In general, the higher child care time of U.S. fathers, vis-à-vis fathers in the other 8 countries, observed in Figure 2 and Table 2 stems from demographic differences that drive up child care time, particularly educational differences. For example, 50% of the 3.1 hour difference in fathers' child care hours between Slovenia and the U.S. is explained by the lower proportion of young children, higher proportions of other adults, and lower education of Slovenian fathers. As with mothers, however, the 3.7 hour difference between U.S. and French fathers is not accounted for by employment or other compositional differences (only 5% of the gap is explained).

Conclusion and Next Steps

Our investigation of cross-national variation in mothers and fathers child care time offers some evidence that working "the American way" reduces mothers', but not fathers' child care time. When employment differences are not considered, mothers' child care time is lowest among French, Slovenian, and Swedish mothers, and highest among U.S. and Australian mothers. But, multivariate results indicate that accounting for employment influences on child care (as well as controls), alters this picture. Employment associations range from nonsignificance in Norway to a substantial negative linear influence in Australia, and to a lesser extent the other English speaking countries. In France, the Netherlands, Sweden, and Slovenia, mothers' child care time is affected more by employment rates, than by hours, suggesting that either maternalist or "family friendly" policies may buffer the downward pressure of employment hours on child care time. In English speaking countries, in contrast, both employment rates and hours negatively influence mothers' child care time. Decomposition results also provide evidence that the child care time of employed mothers is reduced much less in countries that combine family-friendly workplaces with high rates of maternal employment, such as Norway, compared employed mothers child care time in English speaking countries.

Among fathers we find that North American fathers spend more time in child care compared with Continental, Swedish, and Slovenian fathers. There is substantial within-regime variation in the English speaking and Continental countries, however, suggesting demographic and behavioral influences on child care time that do not correlate with regime type.

U.S. mothers thus are exceptional in the extent to which they have both high employment rates and hours and high child care time. We also find suggestive evidence that French mothers too are exceptional, as they spend the second least amount of time in child care activities, 7.2 hours to Slovenia's 6.9 hours, even though employment and demographic factors would appear to favor much higher child care time investments. French fathers offer a similar puzzle. Hence, in next steps, we plan to pursue a systematic exploration of cross-national institutional and micro-level behavioral influences on mothers' and fathers' child care time. We also intend to examine housework differences across countries to determine whether variations are similar. As noted earlier, many activities done for children, such as doing laundry and chauffeuring, are not coded as child care in the MTUS but as housework. Because U.S. mothers have reallocated time from housework to child care, it is possible that considering housework will reduce country gaps in mothers' child care time.

As noted earlier, primary child care time is an underestimate of parents' time with children. Country-level differences observed in this analysis may not hold when time with children in leisure or other activities not coded as child care is considered, or when parental "on-call" time is included. The voluminous literature documenting disadvantage among U.S. parents and children across multiple dimensions – gender equity, family poverty, and child well-being – suggests that overall time with children or the quality of time with children, may vary cross-nationally. Explorations of this empirical question are hampered by data limitations, however. The vital nature of how all aspects of parents' time with children are influenced by micro- and macro-level factors warrants future innovative data collections and empirical investigations.

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Table 1. Average Weekly Child Care Hours (*SD*) of Mothers Ages 25 to 54, by Country and Employment Hours

Employment Hours	US 2003	CAN 1998	UK 2000	AUS 1997	FRA 1998	NET 2000	NOR 2000	SWE 2001	SLO 2000
None	16.0 [a]	14.4 [a,b]	12.4 [b,d]	16.0 [a]	9.3 [c,e]	9.8 [d,e,f,g]	12.0 [b,e,g]	11.8 [b,e,g]	8.1 [c,f]
	17.6	*16.2*	*12.8*	*17.3*	*10.2*	*7.8*	*12.8*	*11.8*	*12.0*
1 to 14	15.5 [a]	15.1 [a]	9.2 [b,c]	12.2 [a,b]	4.9 [c]	10.6 [a,b,c]	10.8 [a,b,c]	NA	NA
	14.1	*13.5*	*13.1*	*13.3*	*8.6*	*9.7*	*10.8*		
15 to 30	12.2 [a]	8.9 [b,c]	7.6 [b,c]	9.4 [b]	7.0 [c]	8.3 [b,c]	9.3 [b]	8.3 [b,c]	9.0 [a,b,c]
	13.9	*11.6*	*9.6*	*11.2*	*8.4*	*8.7*	*11.3*	*9.6*	*9.7*
31 to 40	8.0 [a]	6.8 [a,b]	5.7 [b,c]	7.0 [a,b]	4.9 [c]	NA	10.1 [e]	6.2 [b,c,d]	7.4 [a,d]
	10.4	*8.6*	*10.0*	*11.1*	*6.9*		*12.0*	*8.6*	*12.2*
41 plus	8.0 [a,c]	8.1 [a,c]	5.7 [a,b]	4.9 [b]	6.3 [a,b]	NA [a]	10.5 [c]	5.6 [a,b]	6.1 [a,b]
	10.5	*13.1*	*8.4*	*8.3*	*9.7*		*14.4*	*9.2*	*11.1*
All Mothers	11.4 [a,e]	10.5 [a,d,e]	8.7 [b]	11.7 [a]	7.0 [c]	8.9 [b,c,d]	10.3 [d,e]	7.7 [b,c]	7.3 [c]
	14.0	*13.5*	*11.3*	*14.4*	*8.9*	*8.8*	*12.1*	*9.8*	*11.9*

Note: Author's Calculations, ATUS 2003 and MTUS World 5.52. NA indicates a cell size of 30 or less. Comparing across countries within employment hour categories, means across columns with different superscripts differ significantly at p < .05.

Table 2. Average Weekly Child Care Hours (*SD*) of Fathers Ages 25 to 54, by Country and Employment Hours

Employment Hours	US 2003	CAN 1998	UK 2000	AUS 1997	FRA 1998	NET 2000	NOR 2000	SWE 2001	SLO 2000
None	8.2 [a]	6.7 [a]	6.1 [a,c]	6.9 [a]	3.1 [b,c,d]	NA [a,d]	5.1 [a,d]	4.7 [a,d]	2.1 [b,d]
	13.2	*11.3*	*10.9*	*11.9*	*6.5*		*7.5*	*5.5*	*4.2*
1 to 30	7.7 [a]	7.7 [a]	4.8 [a,b]	5.7 [a,b]	2.0 [b]	NA	4.4 [a,b]	NA	5.9 [a,b]
	15.3	*9.5*	*6.7*	*10.2*	*3.9*		*6.4*		*11.0*
31 to 40	5.3 [a]	5.4 [a]	3.7 [b]	4.5 [a]	1.9 [c]	3.6 [a,b,c]	5.5 [a]	4.8 [a]	3.2 [b]
	9.9	*8.0*	*6.7*	*7.2*	*4.2*	*4.6*	*7.9*	*6.8*	*6.9*
41 to 50	5.7 [a]	5.0 [a,b]	4.1 [b,c,d,e]	4.2 [b,c,d]	1.9 [c,e]	4.6 [a,b,e]	5.2 [a,d]	4.4 [a,b,e]	2.6 [e]
	8.7	*8.0*	*7.0*	*8.0*	*3.4*	*5.1*	*7.5*	*6.7*	*5.4*
51 plus	5.2 [a]	5.6 [a]	3.4 [b,c]	NA	NA	NA	3.9 [a,c]	2.7 [b,c]	2.4 [b,c]
	9.1	*12.4*	*6.7*				*6.5*	*5.4*	*5.9*
All Fathers	5.7 [a]	5.6 [a]	4.0 [b]	4.7 [b,d]	2.0 [c]	4.4 [a,b,e]	5.1	4.4	3.0 [e]
	10.0	*9.9*	*7.3*	*8.4*	*4.5*	*5.3*	*7.6*	*6.5*	*6.5*

Note: Author's Calculations, ATUS 2003 and MTUS World 5.52. NA indicates a cell size of 30 or less. Comparing across countries within employment hour categories, means across columns with different superscripts differ significantly at p < .05.

Table 3. Coefficients from OLS Regressions of Mothers' Weekly Child Care Hours by Country

	US 2003	CAN 1998	UK 2000	AUS 1997	FRA 1998	NET 2000	NOR 2000	SWE 2001	SLO 2000
Employment Hours (41 plus omitted)									
Zero	6.282**	3.852**	4.719**	8.509**	3.454**	2.191*	1.337	2.575*	2.183*
	[0.730]	[1.233]	[0.634]	[0.747]	[1.078]	[1.068]	[1.241]	[1.009]	[0.966]
1 to 14	5.032**	4.651*	3.255**	4.784**	1.54	2.732	-0.285	-0.676	1.279
	[1.177]	[2.040]	[0.860]	[0.852]	[1.519]	[1.618]	[1.408]	[1.663]	[1.204]
15 to 30	3.576**	-0.46	1.666**	2.866**	1.324	1.133	-1.677	0.016	-1.06
	[0.713]	[1.254]	[0.543]	[0.701]	[1.094]	[1.098]	[1.187]	[0.927]	[1.273]
31 to 40	0.062	-1.679	-0.018	1.428*	-0.012	0.837	-1.254	-0.527	0.018
	[0.533]	[1.067]	[0.610]	[0.717]	[1.058]	[1.971]	[1.171]	[0.796]	[0.811]
Children Age 4 and Younger Present	9.527**	11.904**	10.763**	2.229**	6.536**	10.856**	10.438**	6.221**	9.220**
	[0.603]	[0.939]	[0.545]	[0.804]	[0.482]	[1.516]	[0.627]	[0.676]	[0.921]
Number of Children	1.310**	0.622	-0.038	0.604	0.752**	0.457	1.418**	0.498	0.907*
	[0.303]	[0.448]	[0.226]	[0.352]	[0.238]	[0.573]	[0.326]	[0.293]	[0.402]
Household Type (Married Parents No Other Adults Omitted)									
Married Parents Living with Other Adults	-3.446**	-0.252	-1.746**	-2.806**	0.302	-3.368**	-1.405**	-1.191*	-1.832**
	[0.634]	[0.963]	[0.449]	[0.626]	[1.761]	[0.871]	[0.496]	[0.508]	[0.571]
Single Parent No Other Adults	-1.025	0.835	-0.73	-3.119**	-0.079	-2.51	-0.026	-2.112**	-2.732
	[0.539]	[1.038]	[0.471]	[0.812]	[0.523]	[1.400]	[0.737]	[0.523]	[2.475]
Single Parent Living with Other Adults	-2.530**	-2.930*	-2.221**	-5.600**	-4.227**	2.774	-1.26	-0.949	-3.653**
	[0.977]	[1.212]	[0.679]	[1.066]	[1.394]	[3.443]	[1.168]	[0.786]	[1.153]
Education (High Omitted)									
Low	-4.547**	-2.017*	-2.753**	-4.554**	-2.429**	-1.016	-3.329**	-3.468**	-3.660**
	[0.996]	[0.893]	[0.549]	[1.152]	[0.505]	[1.244]	[0.743]	[0.690]	[0.885]
Medium	-1.543**	-1.365	-2.580**	-3.510**	-1.403**	-1.172	-1.266*	-1.944**	-2.898**
	[0.524]	[0.726]	[0.551]	[0.559]	[0.358]	[1.002]	[0.523]	[0.583]	[0.950]
Age Group (25 to 29 Omitted)									
30 to 34	0.919	-0.346	-1.253	-1.024	-0.745	0.797	-2.649**	0.352	-5.258**
	[0.979]	[1.432]	[0.897]	[1.104]	[0.825]	[1.783]	[0.987]	[1.121]	[1.204]
35 to 39	0.696	-1.832	-1.938*	-5.519**	-2.206**	0.051	-4.405**	-1.08	-6.938**
	[0.856]	[1.388]	[0.898]	[1.083]	[0.829]	[1.794]	[1.038]	[1.163]	[1.352]
40 to 44	0.478	-3.602**	-3.253**	-10.578**	-3.637**	-1.435	-4.788**	-1.832	-7.547**
	[0.879]	[1.363]	[0.845]	[1.098]	[0.809]	[2.050]	[1.053]	[1.148]	[1.142]
45 to 49	-1.917*	-4.894**	-4.225**	-11.901**	-4.440**	-1.321	-5.535**	-2.781*	-9.700**
	[0.859]	[1.368]	[0.850]	[1.189]	[0.839]	[2.477]	[1.037]	[1.140]	[1.189]
50 to 54	-2.444*	-6.763**	-5.022**	-14.282**	-4.969**	-1.692	-5.074**	-4.430**	-8.897**
	[1.028]	[1.549]	[0.908]	[1.149]	[0.964]	[2.554]	[1.250]	[1.210]	[1.390]
Constant	4.364**	7.267**	7.522**	13.867**	5.339**	3.948	8.573**	6.958**	11.671**
	[0.991]	[1.753]	[1.006]	[1.303]	[1.418]	[2.537]	[1.461]	[1.452]	[1.421]
R^2	*0.25*	*0.33*	*0.35*	*0.26*	*0.28*	*0.51*	*0.35*	*0.25*	*0.35*
N	4288	1676	2832	2611	2243	324	1737	1980	1746

*Note: Authors' Calculations, ATUS 2003 and MTUS World 5.52. * = p < .05; ** p < .01.*

Table 4. Coefficients from OLS Regressions of Fathers' Weekly Child Care Hours by Country

	US 2003	CAN 1998	UK 2000	AUS 1997*	FRA 1998	NET 2000	NOR 2000	SWE 2001	SLO 2000
Employment Hours (51 plus omitted)									
Zero	3.908**	1.815	3.134**	3.027**	0.913	2.527	2.892**	0.191	0.942
	[1.047]	[1.355]	[0.910]	[0.919]	[1.106]	[2.169]	[0.899]	[0.856]	[0.667]
1 to 30	2.831	2.635	1.607*	2.180*	-0.428	3.712	0.107	2.002*	3.4
	[1.642]	[1.966]	[0.678]	[0.975]	[1.056]	[1.940]	[0.957]	[0.922]	[2.056]
31 to 40	0.652	-0.492	0.374	0.368	-0.426	0.424	1.003	1.151*	0.831
	[0.523]	[1.124]	[0.375]	[0.374]	[1.012]	[1.198]	[0.603]	[0.556]	[0.506]
41 to 50	0.664	-0.918	0.521	NA	-0.559	-0.751	0.965	0.86	0.179
	[0.485]	[1.105]	[0.409]		[1.053]	[1.358]	[0.663]	[0.564]	[0.522]
Children Age 4 and Younger Present	4.141**	6.050**	5.247**	2.452**	1.935**	4.095**	5.445**	3.515**	4.009**
	[0.454]	[0.741]	[0.434]	[0.562]	[0.290]	[0.862]	[0.555]	[0.538]	[0.497]
Number of Children	0.785**	0.79	0.168	0.183	0.021	1.396**	0.759**	0.566*	-0.327
	[0.235]	[0.423]	[0.213]	[0.290]	[0.098]	[0.385]	[0.264]	[0.250]	[0.294]
Household Type (Married Parents No Other Adults Omitted)									
Married Parents Living with Other Adults	0.166	-1.782*	-0.739*	-2.038**	-0.735	0.128	-0.649	-0.767*	-1.401**
	[0.800]	[0.705]	[0.349]	[0.430]	[0.749]	[0.995]	[0.453]	[0.368]	[0.344]
Single Parent	-0.69	-1.722**	-0.988	-3.328**	1.047	2.151	1.242	1.462	-3.393**
	[0.602]	[0.591]	[0.639]	[0.626]	[0.788]	[1.214]	[1.174]	[0.836]	[0.480]
Education (High Omitted)									
Low	-4.140**	-2.517**	-0.515	-0.702	-1.392**	-2.130*	-1.179	-1.964**	-2.377**
	[0.632]	[0.734]	[0.378]	[0.823]	[0.300]	[0.913]	[0.680]	[0.563]	[0.708]
Medium	-1.773**	-2.031*	-0.588	-1.343**	-0.646**	-2.086*	-0.716	-1.114*	-2.018*
	[0.505]	[0.950]	[0.394]	[0.412]	[0.243]	[0.961]	[0.453]	[0.516]	[0.795]
Age Group (25 to 29 Omitted)									
30 to 34	2.520*	-0.837	0.953	1.507	1.132*	3.923*	1.149	1.215	0.886
	[1.027]	[1.883]	[0.796]	[0.772]	[0.501]	[1.963]	[0.871]	[0.874]	[0.887]
35 to 39	1.524	-1.533	0.551	0.812	0.892	2.877	0.999	1.028	-0.485
	[0.941]	[1.620]	[0.720]	[0.735]	[0.487]	[1.712]	[0.882]	[0.887]	[0.850]
40 to 44	1.172	-2.294	0.608	-0.45	0.061	1.735	-0.376	0.616	-1.630*
	[0.955]	[1.630]	[0.789]	[0.757]	[0.481]	[1.623]	[0.833]	[0.869]	[0.749]
45 to 49	-0.31	-1.871	-0.157	-1.830*	0.163	0.58	-0.315	0.257	-1.389
	[0.981]	[1.750]	[0.738]	[0.719]	[0.522]	[1.744]	[0.863]	[0.949]	[0.761]
50 to 54	0.081	-2.972	0.009	-1.856*	-0.09	2.776	-0.735	-0.593	-2.291**
	[1.141]	[1.619]	[0.852]	[0.792]	[0.522]	[2.404]	[0.884]	[0.870]	[0.753]
Constant	1.592	4.660**	1.156	3.972**	1.691	-1.46	0.639	0.873	4.758**
	[0.990]	[1.786]	[0.865]	[0.746]	[1.096]	[2.213]	[1.087]	[1.007]	[1.147]
R^2	*0.10*	*0.17*	*0.16*	*0.10*	*0.09*	*0.39*	*0.20*	*0.14*	*0.21*
N	3035	1272	2151	2137	1865	156	1167	1149	1514

*Note: Authors' Calculations, ATUS 2003 and MTUS World 5.52. * = p < .05; ** p < .01. In Australia, the reference group for work hours is 41 and above.*

Table 5. Decomposition of Predicted Cross-National Differerences in English Speaking, Continental, Nordic, and Slovenian Mothers' and Fathers' Weekly Child Care Time, based on U.S. Rates

	Mothers								
	US 2003	**CAN 1998**	**UK 2000**	**AUS 1997**	**FRA 1998**	**NET 2000**	**NOR 2000**	**SWE 2001**	**SLO 2000**
Predicted Child Care Hours, Based on Own Country Rates	11.6	10.9	8.6	11.3	7.2	9.9	10.9	7.4	6.9
Predicted Child Care Hours, Based on U.S. Rates	11.6	10.5	9.4	10.5	7.2	8.8	10.2	8.1	9.1
Employment Rates Only	11.6	10.5	8.1	10.3	6.9	9.3	11.2	7.7	7.0
Demographic Rates Only	11.6	10.9	9.9	11.6	7.4	9.3	9.9	7.8	9.0
Difference in Predicted Child Care Hours (U.S. Mothers' Hours - Other Mothers' Hours on Own Rates)	0.00	0.68	3.03	0.24	4.43	1.73	0.72	4.23	4.70
Employment & Demographic Composition Component	0.00	-0.41	0.88	-0.80	0.05	-1.09	-0.66	0.77	2.20
Employment Distribution Component	0.00	-0.37	-0.44	-1.01	-0.23	-0.54	0.33	0.34	0.14
Demographic Composition Component	0.00	-0.05	1.33	0.20	0.28	-0.55	-0.99	0.43	2.06
Percentage of Difference Accounted For By:									
Employment & Demographic Composition Component	0%	-61%	29%	-338%	1%	-63%	-91%	18%	47%
Employment Distribution Component	0%	-54%	-15%	-424%	-5%	-31%	46%	8%	3%
Demographic Composition Component	0%	-7%	44%	86%	6%	-32%	-137%	10%	44%

	Fathers								
	US	**CAN 1998**	**UK 2000**	**AUS 1997**	**FRA 1998**	**NET 2000**	**NOR 2000**	**SWE 2001**	**SLO 2000**
Predicted Child Care Hours, Based on Own Country Rates	5.8	5.7	3.9	4.6	2.1	4.7	5.1	4.4	2.7
Predicted Child Care Time, Based on U.S. Rates	5.8	5.6	4.3	4.7	2.3	4.8	5.2	4.2	4.3
Employment Rates Only	5.8	5.6	3.9	4.6	2.1	4.6	5.0	4.4	2.7
Demographic Rates Only	5.8	5.8	4.2	4.7	2.3	4.9	5.3	4.3	4.3
Difference in Predicted Child Care Time (U.S. Fathers' Hours - Other Fathers' Hours on Own Rates)	0.0	0.1	1.9	1.3	3.7	1.1	0.7	1.4	3.1
Employment & Demographic Composition Component	0.0	-0.1	0.3	0.1	0.2	0.1	0.1	-0.2	1.5
Employment Distribution Component	0.0	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	0.0
Demographic Composition Component	0.0	0.0	0.3	0.1	0.2	0.2	0.2	-0.1	1.6
Percentage of Difference Accounted For By:									
Employment & Demographic Composition Component	0%	-128%	18%	7%	5%	7%	13%	-14%	50%
Employment Distribution Component	0%	-152%	1%	-1%	1%	-11%	-12%	-6%	-1%
Demographic Composition Component	0%	24%	17%	8%	5%	17%	25%	-8%	50%

Note: Author Calculations from Regression Models Shown in Tables 3 and 4 and Sample Characteristics Shown in Appendix Tables 1 and 2.

Predicted Minutes C_1 - Predicted Minutes C_2 = $Y(B_{C1}*X_{C1} - B_{C1}*X_{C2}) + Y(B_{C1}*X_{C2} - B_{C2}*X_{C2})$

Table 6. Decomposition of Predicted Cross-National Differerences in U.S. Mothers' and Fathers' Weekly Child Care Time, Based on Rates of Mothers and Fathers in Other Countries

	Mothers								
	US 2003	**CAN 1998**	**UK 2000**	**AUS 1997**	**FRA 1998**	**NET 2000**	**NOR 2000**	**SWE 2001**	**SLO 2000**
Predicted Child Care Hours, Based on Own Country Rates	11.6	10.9	8.6	11.3	7.2	9.9	10.9	7.4	6.9
	U.S. Mothers								
	US on US	**US on Canada**	**US on UK**	**US on Australia**	**US on France**	**US on NET**	**US on Norway**	**US on Sweden**	**US on Slovenia**
Predicted Child Care Hours of U.S. Mothers, Based on Rates of Mothers in Other Countries	11.6	11.6	10.7	12.1	11.7	12.2	12.1	11.3	7.4
Employment Rates Only	11.6	12.1	12.5	12.9	12.2	13.4	11.8	11.0	10.3
Demographic Rates Only	11.6	11.0	9.8	10.8	11.0	10.3	11.9	11.9	8.7
Difference in Predicted Child Care Hours (Other Mothers' Hours Own Rates - U.S. Mothers' Hours US Rates)	0.00	-0.68	-3.03	-0.24	-4.43	-1.73	-0.72	-4.23	-4.70
Employment & Demographic Composition Component	0.00	-0.01	-0.86	0.55	0.08	0.58	0.51	-0.25	-4.15
Employment Distribution Component	0.00	0.55	0.88	1.35	0.63	1.86	0.20	-0.56	-1.29
Demographic Composition Component	0.00	-0.56	-1.74	-0.80	-0.55	-1.28	0.31	0.32	-2.85
Percentage of Difference Accounted For By:									
Employment & Demographic Composition Component	0%	2%	28%	-233%	-2%	-33%	-71%	6%	88%
Employment Distribution Component	0%	-82%	-29%	-570%	-14%	-107%	-28%	13%	28%
Demographic Composition Component	0%	83%	58%	337%	12%	74%	-43%	-8%	61%

	Fathers								
	US 2003	**CAN 1998**	**UK 2000**	**AUS 1997**	**FRA 1998**	**NET 2000**	**NOR 2000**	**SWE 2001**	**SLO 2000**
Predicted Child Care Hours, Based on Own Country Rates	5.8	5.7	3.9	4.6	2.1	4.7	5.1	4.4	2.7
	U.S. Fathers								
	US on US	**US on Canada**	**US on UK**	**US on Australia**	**US on France**	**US on NET**	**US on Norway**	**US on Sweden**	**US on Slovenia**
Predicted Child Care Hours of U.S. Fathers, Based on Rates of Fathers in Other Countries	5.8	5.8	4.5	5.8	6.1	5.1	5.5	5.4	3.5
Employment Rates Only	5.8	6.1	5.8	6.2	4.9	6.1	6.0	5.8	5.7
Demographic Rates Only	5.8	5.5	4.5	5.5	5.2	4.9	5.4	5.4	3.6
Difference in Predicted Child Care Hours (Other Fathers' Hours Own Rates - U.S. Fathers' Hours US Rates)	0.00	-0.09	-1.92	-1.27	-3.73	-1.14	-0.74	-1.39	-3.10
Employment & Demographic Composition Component	0.00	-0.05	-1.33	0.00	0.26	-0.70	-0.31	-0.40	-2.32
Employment Distribution Component	0.00	0.27	0.01	0.34	-0.88	0.25	0.14	-0.02	-0.08
Demographic Composition Component	0.00	-0.32	-1.33	-0.34	-0.62	-0.94	-0.45	-0.38	-2.24
Percentage of Difference Accounted For By:									
Employment & Demographic Composition Component	0%	52%	69%	0%	-7%	61%	42%	29%	75%
Employment Distribution Component	0%	-286%	0%	-27%	24%	-22%	-19%	1%	3%
Demographic Composition Component	0%	338%	69%	27%	17%	83%	61%	27%	72%

Note: Author Calculations from Regression Models Shown in Tables 3 and 4 and Sample Characteristics Shown in Appendix Tables 1 and 2.

Predicted Minutes C_1 - Predicted Minutes C_2 = $Y(B_{C1}*X_{C1} - B_{C1}*X_{C2}) + Y(B_{C1}*X_{C2} - B_{C2}*X_{C2})$

Appendix Table 1. Sample Characteristics of Mothers Ages 25 to 54, by Country

	US 2003	CAN 1998	UK 2000	AUS 1997	FRA 1998	NET 2000	NOR 2000	SWE 2001	SLO 2000	All Mothers
Employment Hours										
Zero	0.30	0.38	0.30	0.40	0.39	0.39	0.23	0.19	0.17	0.30
1 to 14	0.04	0.04	0.10	0.14	0.02	0.14	0.05	0.01	0.01	0.06
15 to 30	0.16	0.15	0.30	0.20	0.18	0.36	0.30	0.21	0.04	0.20
31 to 40	0.37	0.31	0.19	0.17	0.39	0.07	0.36	0.49	0.55	0.33
41 to 50	0.09	0.08	0.07	0.09	0.02	0.03	0.05	0.08	0.18	0.08
51 and higher	0.04	0.04	0.04	0.00	0.01	0.00	0.01	0.02	0.06	0.03
Child Variables										
Children age 4 and under	0.38	0.33	0.33	0.30	0.31	0.36	0.45	0.45	0.35	0.36
Number of Children	1.93	1.87	1.89	1.99	2.05	1.86	1.84	1.87	1.66	1.90
Household Type										
Married Parents No Other Adults	0.63	0.70	0.68	0.72	0.86	0.79	0.75	0.75	0.54	0.70
Married Parents and Other Adults	0.15	0.14	0.12	0.13	0.02	0.08	0.13	0.08	0.38	0.14
Single Parents No Other Adults	0.13	0.12	0.16	0.10	0.11	0.08	0.10	0.15	0.03	0.12
Single Parents and Other Adults	0.09	0.04	0.04	0.05	0.01	0.05	0.02	0.01	0.06	0.05
Education										
Uncompleted Secondary or Less	0.12	0.13	0.33	0.07	0.18	0.35	0.09	0.11	0.42	0.18
Completed Secondary	0.29	0.28	0.40	0.46	0.45	0.37	0.54	0.53	0.38	0.40
Above Secondary	0.59	0.59	0.28	0.47	0.37	0.28	0.37	0.35	0.20	0.42
Age Group										
25 to 29	0.15	0.11	0.14	0.15	0.12	0.11	0.14	0.10	0.17	0.14
30 to 34	0.22	0.21	0.21	0.22	0.21	0.23	0.23	0.20	0.23	0.22
35 to 39	0.22	0.29	0.24	0.24	0.25	0.25	0.24	0.25	0.29	0.25
40 to 44	0.22	0.23	0.21	0.20	0.25	0.23	0.20	0.22	0.19	0.22
45 to 49	0.13	0.12	0.13	0.13	0.12	0.14	0.14	0.16	0.09	0.13
50 to 54	0.06	0.03	0.06	0.06	0.04	0.04	0.05	0.07	0.03	0.05
N	4288	1676	2835	2611	2243	324	1737	1980	1746	19440

Note: Author Calculations, MTUS World 5.52

Appendix Table 2. Sample Characteristics of Fathers Ages 25 to 54, by Country

	US 2003	CAN 1998	UK 2000	AUS 1997	FRA 1998	NET 2000	NOR 2000	SWE 2001	SLO 2000	All Fathers
Employment Hours										
Zero	0.08	0.16	0.08	0.12	0.11	0.12	0.09	0.06	0.04	0.09
1 to 30	0.05	0.04	0.05	0.06	0.05	0.05	0.05	0.02	0.03	0.04
31 to 40	0.42	0.31	0.34	0.30	0.77	0.53	0.51	0.54	0.57	0.46
41 to 50	0.25	0.26	0.26	0.52	0.05	0.20	0.24	0.27	0.22	0.26
51 and higher	0.21	0.24	0.26	0.00	0.01	0.10	0.12	0.12	0.14	0.14
Child Variables										
Children age 4 and under	0.42	0.39	0.38	0.32	0.34	0.42	0.42	0.50	0.36	0.39
Number of Children	1.96	1.92	1.90	1.99	2.04	1.85	1.91	1.92	1.64	1.92
Household Type										
Married Parents No Other Adults	0.73	0.82	0.83	0.81	0.95	0.87	0.83	0.79	0.57	0.79
Married Parents and Other Adults	0.19	0.14	0.13	0.14	0.02	0.11	0.14	0.10	0.38	0.15
Single Parent	0.08	0.04	0.04	0.05	0.03	0.02	0.03	0.11	0.05	0.05
Education										
Uncompleted Secondary or Less	0.13	0.17	0.32	0.08	0.15	0.30	0.09	0.16	0.52	0.20
Completed Secondary	0.31	0.24	0.42	0.28	0.52	0.30	0.53	0.50	0.35	0.38
Above Secondary	0.57	0.59	0.26	0.64	0.32	0.40	0.38	0.34	0.14	0.42
Age Group										
25 to 29	0.12	0.08	0.09	0.10	0.09	0.05	0.11	0.06	0.11	0.10
30 to 34	0.19	0.18	0.20	0.17	0.19	0.15	0.18	0.17	0.21	0.19
35 to 39	0.24	0.26	0.24	0.23	0.22	0.26	0.25	0.24	0.23	0.24
40 to 44	0.21	0.24	0.21	0.23	0.25	0.26	0.19	0.25	0.24	0.23
45 to 49	0.16	0.17	0.17	0.17	0.17	0.19	0.17	0.17	0.15	0.16
50 to 54	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.11	0.07	0.09
N	3035	1272	2152	2137	1865	156	1167	1149	1514	14447

Note: Author Calculations, ATUS 2003 and MTUS World 5.52

Figure 1. Mothers' Weekly Employment Hours Distribution by Country

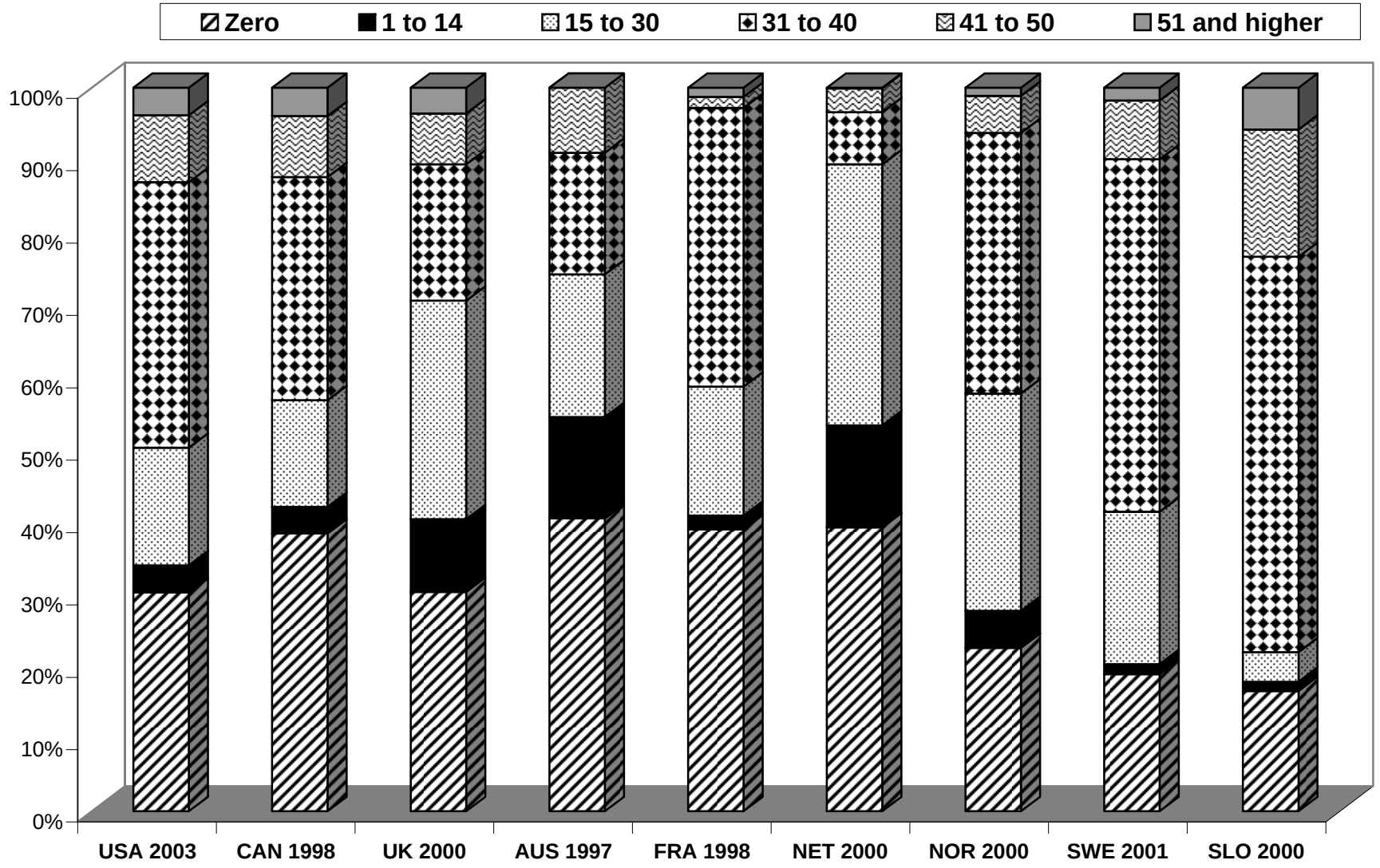

Figure 2. Fathers' Weekly Employment Hours Distribution by Country

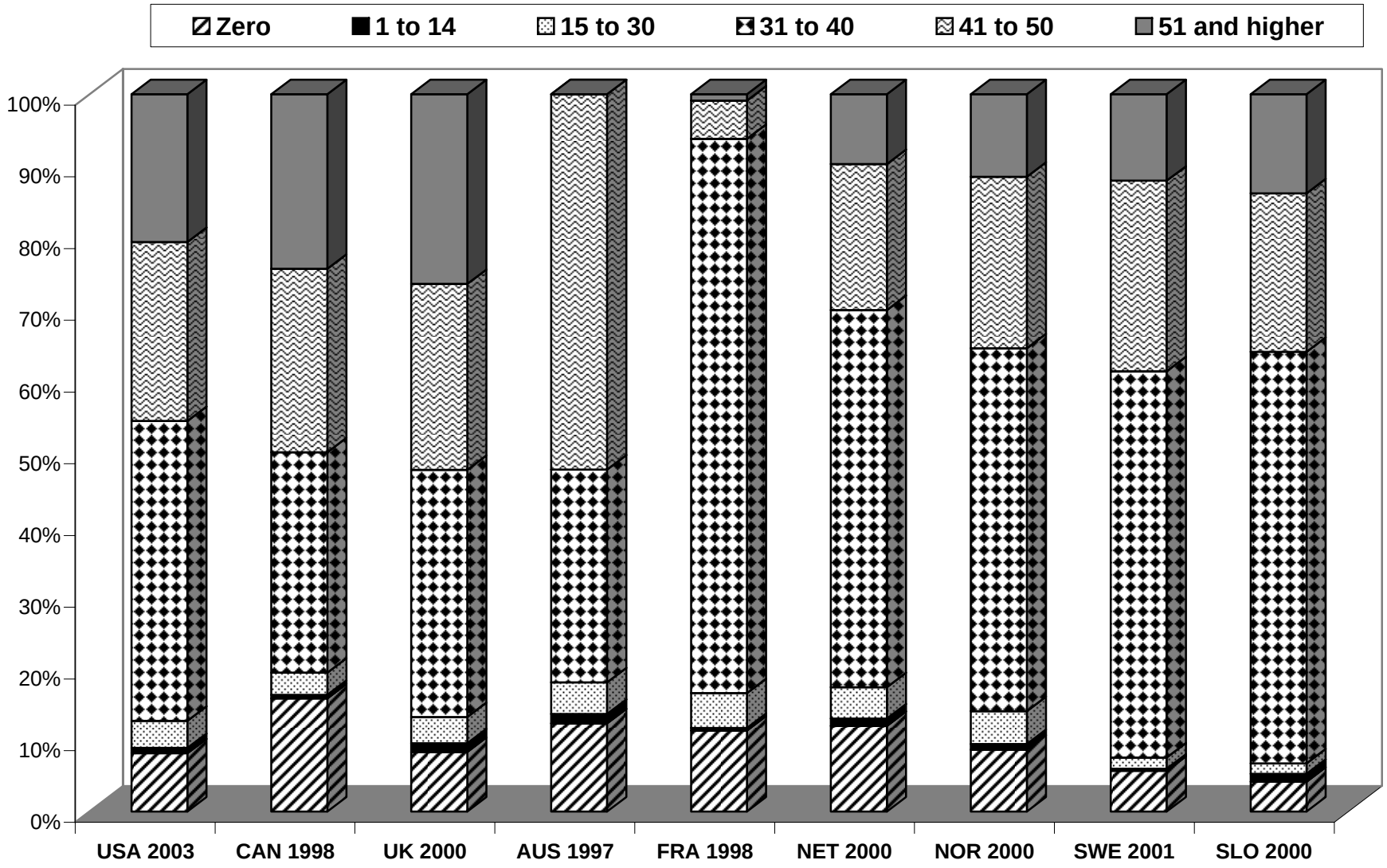

Figure 3. Mothers' Primary Child Care Hours per Week, by Country

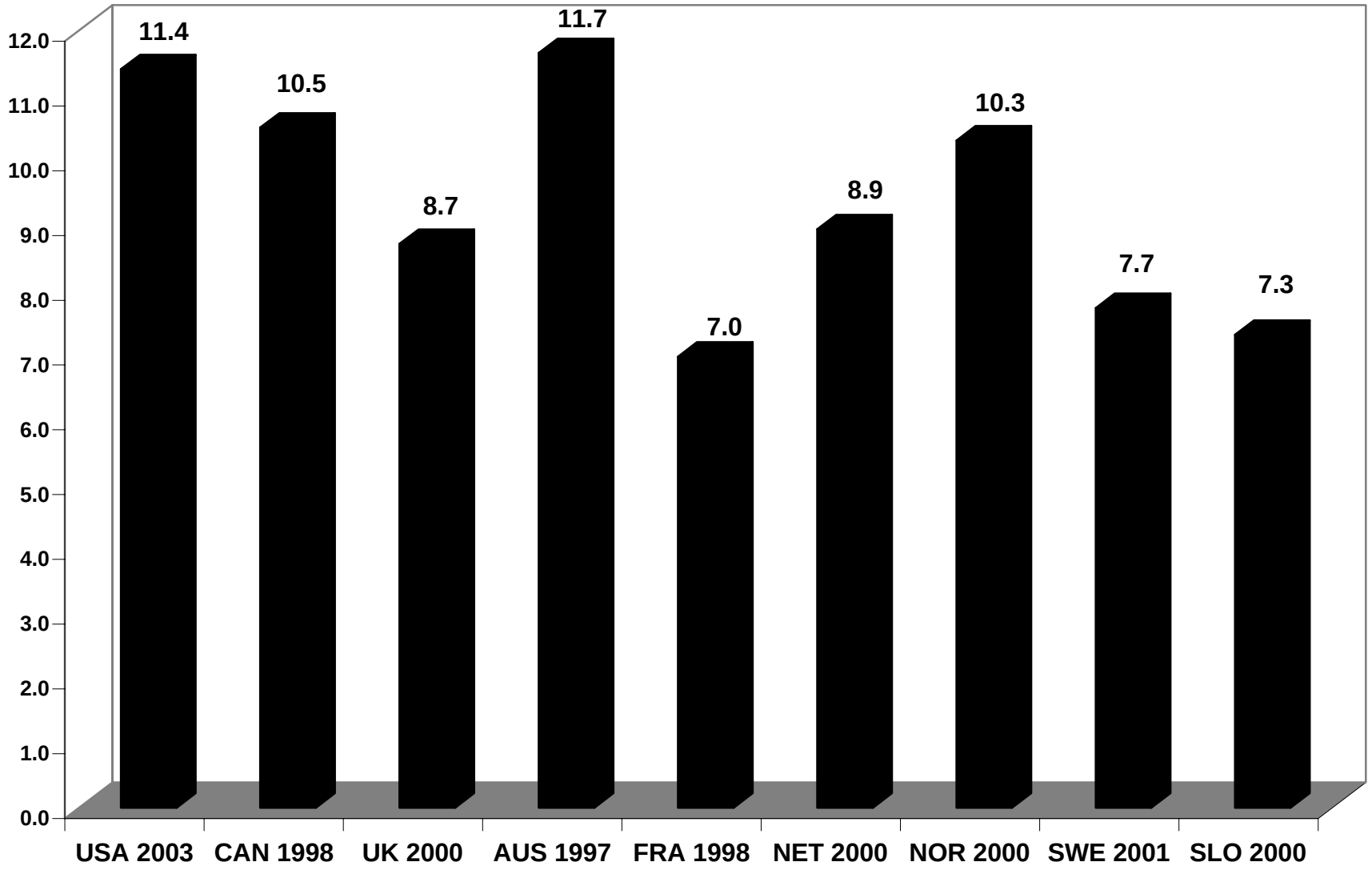

Figure 4. Fathers' Primary Child Care Hours per Week, by Country