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Once the Dust Settles. Did the 1990s Lead to Re-Traditionalisation? Time Use Evidence from Scandinavia.

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Abstract

This comparative study investigates the impact of parenthood on gendered time use in paid and unpaid work, child care and leisure in Scandinavia. Having (young) children at home generally intensifies gendered patterns in time use, and strengthens a traditional household division of labour, whereby women perform more child care and housework than men. In Sweden during the 1990s, this pattern changed and parenthood affected men's and women's time use more similarly in 2000. In this article we ask whether this was a unique Swedish phenomenon? We also ask whether developments regarding time use were connected more so to economic crisis, or to societal changes towards gender equality. Using six waves of time diary data from the Multinational Time Use Survey (MTUS), we perform multivariate Tobit regressions, comparing what happened in Sweden during the 1990s to developments in Norway and Finland during the same period. Our results indicate that in all three countries, parenthood around year 2000 affected men and women in a more similar way than before. Gendered patterns of time use in housework and child care showed a less traditional, gender converging pattern. We suggest that these developments were not a by-product of economic crisis, but rather due to underlying societal changes towards greater gender equality.

Key words: time use, parenthood, economic crisis, gender equality, Sweden, Finland, Norway

Once the Dust Settles. Did the 1990s Lead to Re-Traditionalisation? Time Use Evidence from Scandinavia.

By the onset of the 1990s, the Nordic countries were at the international forefront with respect to gender equality, complimented by progressive family-friendly policies that enable mothers and fathers to balance work and family life. Certain demographic and social changes began decades earlier, including converging gender roles, high levels of female labour force participation, female educational parity with men, and a predominance of dual-earner households. These phenomena, predominantly in the productive sphere, are known to trend similarly within the Nordic context. Less is, however, known about trends in the reproductive sphere, for example regarding the division of household labour and how the presence of (young) children affects men's and women's activities.

A study by Dribe & Stanfors (2009) on time use in Sweden shows that while parenthood in 1990 clearly strengthened a traditional gender division of labour in the household, this was much less the case in 2000, when parenthood affected men and women in a more similar way. As the 1990s were turbulent times in Sweden, it may be suggested that these results are related to the economic crisis. Sweden, like Finland, suffered society-altering financial and economic crises in 1991, bringing about institutional and structural changes, the effects of which lingered for many years, especially considering employment. This unusual decade raises important questions concerning gender equality and the relationship between parenthood and gender-specialised patterns of time use, such as how time allocations might change before and after crisis periods, and whether gender equality can progress during uncertain economic times, and if so, could the crisis itself drive the outcomes.

The aim of this paper is to investigate how the presence of young children in the household affects the time use of mothers and fathers in Sweden, Norway and Finland, and how time allocations changed during the 1990s. We explore whether gender equality advanced or was pushed back during the turbulent 1990s. Our study is modelled after Dribe & Stanfors (2009), with whom we compare findings to what happened in Sweden between 1990/1991 and 2000/2001, with Norway (1990 and 2000) and Finland (1987 and 1999) for the same period, performing multivariate Tobit regressions using cross-sectional MTUS harmonised data.¹ The dates of these cross-sections are convenient for this analysis, bracketing economic crisis in Finland and Sweden, while Norway serves as our control group, as it was not affected by economic crisis in a similar way.² The comparison is also motivated by the many similarities between the countries when it comes to socio-economic and demographic characteristics, their cultural and geographical proximity, and their similar gender-neutral family-friendly policy developments.

Background

Throughout Europe and the United States, women's time in paid work has increased since the 1960s, and their time spent in unpaid work gradually declined, but not enough to compensate for their increased work hours (Bianchi 2000, Gauthier, Smeeding & Furstenberg 2004). Men increased their time in unpaid activities, but this failed to compensate for the change in hours worked by women (Sayer 2005), and some would argue to the extent that the gender revolution had stalled (Hochschild 1989). Others however argue that change is still under way across nations (Bianchi, Robinson & Milkie 2006, Gershuny 2000). The trend towards a convergence of men's and women's time use was facilitated by women's increase in labour force participation, along with increasing access to household technology and services that reduced routine housework. But this convergence has also developed due to the process of

evolving attitudes amongst later-born generations, suggesting there still remains potential for change, as younger men and women are likely to hold more gender equal ideals, be less gender-specialised with respect to time use, and adapt to a less traditional household division of labour as adults and parents.

The way in which parenthood affects the allocation of time among men and women is a test to gender equality. It is also important as it concerns the labour market, work-family balance, and the human capital of parents and their children. Numerous studies support the notion that parenthood intensifies gendered patterns in time use and strengthens a traditional division of labour, where women perform more housework and child care while men do more paid work (Bianchi 2000, Sayer 2005 on the U.S., Craig 2005, 2006 of Australia, Hallberg & Klevmarken 2003 on Sweden, Knijn & Selten 2002 on the Netherlands, Gershuny & Sullivan 2003, Sullivan and Gershuny 2001 for international comparisons). Many studies find the overall workload of mothers to exceed that of fathers, which can lead not only to work family balance issues and tension within a union aiming for an equitable household division of labour, but also gender differences in well-being.

That economic crisis affects how people spend their time is beyond questioning (Aguar, Hurst & Karabounis 2011). The most obvious development is that those who lose their jobs spend less time in paid work, but it is less clear how individuals reallocate lost work hours into other activities, if those who remain employed work the same hours or even more, and if this holds constant for all categories of people, irrespective of gender, age, and stage of the life cycle. Although we know that crises leave an imprint on many people's lives, they are not well understood from a time use perspective. Experiences from the 1990s may serve as an important input into our understanding of how gender equality, economic crisis, and policies

interact, and illuminate which policies matter for restructuring gendered behaviour during more recent and future crises.

Although the Nordic societies seem quite homogenous in their character, nuances exist in family policy developments from the perspective of the combined dual-earner/dual-carer versus male-breadwinner models (Datta Gupta, Smith & Verner 2008). All three countries of interest for this study aimed to achieve a dual-earner/dual-carer model, of which Sweden and then Finland had progressed further towards by 1990. Norway maintained the male-breadwinner model longer than the other Nordic countries, where the dual-earner gender-equal model was presented as an option and not a norm (Skrede 2002). Two cornerstones of the dual-earner/dual carer-model are affordably priced and accessible child care, plus legally mandated parental leave (available to both parents) with generous income replacement, enabling individuals to balance parenthood with labour market attachment. These have been available in the Nordic societies for decades. Of interest for this study are changes within this policy environment during the period that may affect time use of parents. Considering paid maternity leave, the most notable adjustment made would be Norway's extension from 32 weeks in 1990 to 52 weeks in 2000, a catch-up to more comparable levels with Sweden and Finland, who did not make any significant adjustments (Rønsen & Sundström 2002). Considering access to public child care, by the early 1990s, enrolment rates of pre-school children were 52 per cent in Sweden, and 40 per cent in Norway and Finland. By 1999, coverage rates were 64 per cent in Sweden and roughly 50 per cent in Finland and Norway. Thus, the percentage of children enrolled increased during the period in all three countries, which may influence time parents spend performing certain tasks related to childbearing.

According to Nyberg (2006), the preconditions for the dual-earner/dual-carer model are economic growth, balanced public finances, and full employment. During the 1990s, Sweden and Finland in particular failed on all these accounts, due to significant financial and economic crises that struck both countries around 1991. Economic growth and public finances were heavily disrupted for several years, and unemployment reached historical highs, peaking for prime-aged persons (aged 25–54) at 14.1 per cent in Finland, 8.9 per cent in Sweden, compared to 5.0 per cent in Norway (see figure 1). Norway also experienced a crisis in 1988, yet its outcomes, although significant, were much less severe than experienced by Sweden and Finland (Reinhart & Rogoff 2008, Verick 2009). By the late 1990s unemployment remained well above pre-crisis levels in Sweden and Finland, while in Norway full-employment had nearly been restored. Recovery in Finland and Sweden featured labour market developments that decreased the compatibility between work and family life, including an increase in temporary work contracts, particularly among women and the young (Vikat 2004). Interestingly, employment rates of women in Sweden and Finland peaked around 1990, while in Norway the female employment rate increased over the decade.

Figure 1 about here

In Sweden during the 1990s, the dual-earner/dual-carer model was supported despite a difficult economic crisis by increasing access to publicly subsidised day care, reducing cash benefits available to parents, and by withholding a planned extension of parental leave entitlements. Fathers' quotas, a period of parental leave available only to fathers, support the dual earner model. They were implemented in 1995 in Sweden,³ 1993 in Norway, and Finland did not incorporate a fathers' quota during the period. We can observe that during the 1990s, fathers' share of parental leave uptake increased in all three countries, but at different rates. In

Sweden, fathers' leave share increased from 7 per cent in 1990 to 14 per cent in year 2000, whereas in Norway, it grew from 0.6 to 7.2 per cent. Growth in this respect was much slower in Finland, where the comparable increase was from 2.4 to 4.0 per cent (Haataja 2009, Rønsen & Sundström 2002, Stanfors 2003). Men's increased leave share over time should influence men's and women's time use inversely, at least among those with young children.

Policies available during the 1990s could have alternatively supported a male-breadwinner model, affecting the time use of men and women differently. For example, extended periods of parental leave, especially when taken by mothers, could increase the time performing child care and housework of women relative to men. Cash-for-care transfers, implemented with the stated goals of allowing parents the choice to spend more time with children (Brandth & Kvande 2006, Rønsen & Kitterød 2010), can support the male-breadwinner family model because these transfers are almost exclusively accessed by women. In this regard, policies in Finland during our period of study deviate considerably from Norway and Sweden. Finland's home care allowance (HCA) was implemented in 1985, a new law that granted parents of children under three the right to either a day care placement or cash support for care of their child. The program was rolled out gradually from 1985 to 1990, and HCA recipients doubled between 1987 and 1993, as the benefit and unemployment benefits could be simultaneously received until 1993, providing an attractive alternative to paid work during the early part of the recession (Sipalä & Korpinen 1998). Finnish fertility, especially higher order births, show parallel features with the high uptake of HCA during the period (Vikat 2002). The labour force participation of Finnish women with children under three suffered during this period, declining from 67 per cent in 1989 to 48 per cent by 1995 (Sipalä & Korpinen 1998). Much of this decline has been attributed to policy (Vikat 2004), yet the fact that women in Finland are much less likely to work part-time (compared with Sweden and Norway) surely contributed.

Altogether, the Finnish HCA program could have preserved the gendered division of labour in the household, at least among a particular cohort. In Norway, a cash-for-care scheme became eligible to parents of one year olds only in 1998 and parents of children up to two in 1999. Yet post-reform research has found that in the short-term women reduced their employment to a very limited extent and no impact was found on father's employment (Baklien, Gulbrandsen & Ellingsæter 2001). There is some evidence that female labour supply was negatively affected somewhat in the long-term (Rønsen 2009). In Sweden, there was a cash-for-care initiative of 1994, but it lasted less than one year.⁴ A relevant differentiation of the Finnish program was that it was available when the crisis struck, becoming an easy alternative to paid work during a deteriorating job market.

In summary, while the Nordic welfare model remained intact during the 1990s, it could be argued that policy developments in Sweden and Norway better aimed to alter the gendered behaviour of parents than in Finland. The most noteworthy policy changes that support the a more gender equal division of labour were the expansion of child care placement and increased male uptake of parental leave, which occurred in all three countries. Norway also expanded their parental leave entitlement to catch-up with Sweden and Finland. Alternatively, Finland's cash for care program, taken near-exclusively by women, may have incentivised a more traditional division of labour. Considering this, we move on to assess if the 1990s pushed back gender equality or whether advances were made.

Previous research and theoretical considerations

From a time use perspective, it is well-documented that the presence of children, especially pre-schoolers, within the household increases time spent performing child care and housework. Those who become parents often resort to a more traditional division of labour,

the changes being more pronounced for women (Bianchi, Robinson & Milkie 2006).

Specialization within the household division of labour can be explained in accordance with neoclassical economic theory, where men and women in a union specialise according to their comparative advantages in order to maximise utility for the household (Becker 1981). Since gender wage gaps exist, men are economically incentivised to specialise in paid work and women to specialise in unpaid work, including housework and child care. Although gender differences have been diminishing in recent periods, women continue to devote more hours to non-paid work and child care than do men in most contexts, ranging from the progressive Nordic countries to the more traditional countries of Continental Europe and the US (Craig & Mullan 2010, Gauthier, Smeeding & Furstenberg 2004, Gershuny 2000). Some argue that this is dependent on what kind of welfare state regime the country adheres to (Sullivan & Gershuny 2001), how oriented to gender equality the country in question is, and what kind of work-family policies are available. The general trend across nations, however, indicates that the difference between mothers' and fathers' time in child care is narrowing (Gauthier, Smeeding & Furstenberg 2004), more so than it is in housework.

Generally speaking, the patterns of time use are rather similar across industrialised countries. This is one of three dimensions of convergence in time use identified by Gershuny (2000); the other two being convergence by gender and by class or social status. Gershuny also finds a constant balance between the totals of paid and unpaid work in different industrialised societies. Within the context of contemporary times in Europe, it is uncertain how gendered time allocations in the household might change over a turbulent economic decade, and previous studies are very limited. In Sweden, Dribe and Stanfors (2009) found that in 1990, parenthood clearly strengthened a traditional division of labour within the household, but by 2000 this effect had reduced considerably, when parenthood affected both men and women

more similarly. This indicates that gender equality may advance even during recessionary times, made possible if the period coincides with institutional reforms designed to enhance gender equality, such as increasing child care placements and incentivizing fathers to increase their uptake of parental leave. Since we know gender equality from this perspective advanced in Sweden during the 1990s, we are curious if the same advancements took place in Norway and Finland.

As previously mentioned, periods of economic crisis surely affect how people spend their time; the most obvious symptom being a decrease in hours worked through rising unemployment and involuntary part-time work (Reinhart & Rogoff 2008, Walby 2009). It is less clear how individuals reallocate lost work hours into other activities. One of the few examples hereof is a recent study by Aguiar, Hurst & Karabounis (2011). Using data from the American Time Use Survey (ATUS), they explored how households allocated their time over the business cycle, finding that more than a third of market work hours foregone are allocated to increased non-market work and increased child care. In particular, they found an increase in routine housework, that indicates substitution, but also maintenance housework increased. However, the lion's share of foregone work hours during recession, at least in the US, is allocated to leisure. The lack of studies from other contexts makes it difficult to generalise from these findings, however.

Whether the reallocation of time during recessionary periods is similar for all categories of people or if it varies with gender, age, and stage of the life cycle has not been much studied either. That gender matters is evident from both individual-level analysis (Aguiar, Hurst & Karabounis 2011) and macro-level analysis (Walby 2009). At the individual level, gender differentials in market work, non-market work and leisure continued a convergence trend in

the U.S. from 2007 to 2010 (Aguiar, Hurst & Karabounis 2011). Less is known about how age and stage of the life cycle matter in this respect, although both aspects are of general importance for time allocation (Ghez & Becker 1975; Aguiar & Hurst 2007).

Hypotheses

From the discussion so far we propose three hypotheses concerning the impact of parenthood on men's and women's time use and how it changed in Sweden, Norway, and Finland during the 1990s. First, we expect that parenthood affects gendered time use and strengthens a traditional division of labour around 1990, not only in Sweden but also in Norway and Finland. We know however that in Sweden, parents became less traditional concerning the household division of labour over the 1990s. Thus, our second hypothesis is that this was not a unique Swedish phenomenon, and we anticipate this trend will also be observable in Norway and Finland, but to varying extents. Thirdly, if the changes taking place in Sweden during the 1990s were strongly related to the crisis, then we expect similar and even more change in Finland, but not in Norway. On the contrary, if changes are more related to profound societal change towards greater gender equality, we hypothesise that parenthood will affect men and women more equally by the decade's end in all three countries. This should be particularly so in Sweden and Norway, but less so in Finland, where we believe the near-exclusive female uptake of Finland's cash for care program may have worked against gender equality concerning time spent in housework and child care.

Data and methods

Our analysis uses six waves of time diary survey data from the *Multinational Time Use Study* (Version 2006 World 5.5 – release 2). For Sweden, we use waves from 1990/91 and 2000/01, conducted by Statistics Sweden, in order to replicate the 2009 study by Dribe and Stanfors. We also use two waves of time diary data from Finland (1987 and 1999) and Norway (1990 and 2000). These cross sections surround the crisis years in Sweden and Finland, allowing us to examine pre- and post-crises time use. The samples are weighted and considered to be nationally representative (Gershuny 2000), including information on how respondents spend their time performing 41 different grouped activities within a 24-hour period. Time allocated to different activities was reported in 10 minutes intervals up to a maximum of 1440 minutes for one weekday and one weekend day per respondent. We utilise data from primary activities only, and focus our study on weekday time use.⁵ We restrict our analysis to persons aged 20–64, equating to 6,878 unique individuals for Sweden, 11,610 for Finland, and 7,633 for Norway.⁶ Our data possesses a suitable number of parents, more than 40 per cent within each sample. We have grouped the different time use activities into five main categories, which we expect to be related to parenthood in different ways, and two residual categories:

1. *Paid work* is the aggregate of paid work outside and at home, including second jobs. Travel to and from work is excluded, as this study's primary focus is on how parental responsibilities may affect working time, and we do not wish to confound this with travel time. Including travel time into this category would disproportionately influence part-time work, and since women, and especially mothers, are more likely to work part-time, this would overstate their total working hours and bias estimates.

2. *Routine housework* includes cooking/washing up, doing housework (cleaning, laundry,

etc.), shopping, and domestic travel (for example when going shopping). This categorisation aims to capture routine tasks, but may inadvertently capture tasks such as shopping and cooking for pleasure. Since there is no suitable method for distinguishing between routine and pleasurable housework, we include shopping and cooking under the expectation that the vast majority of weekday time spent in these areas is of the routine variety.

3. *Maintenance housework* is defined as time in non-routine domestic work, such as maintaining the house or car, caring for pets, gardening, and other odd jobs. Compared with routine housework, these activities occur more irregularly and may contain different gender allocations (as found by Coltrane 2000), and are thus categorised separately.

4. *Child care* consolidates various aspects of time spent with children as the primary activity, including both routine and high quality activities. It thus includes changing diapers, bathing, dressing children, etc., together with reading, talking, and playing with children.⁷ It also includes being present at child activities.

5. *Individual leisure* attempts to aggregate individually-orientated activities, such as time spent participating in or watching sports and/or leisure activities. Here we consider activities that are done for personal benefit, but not necessarily performed alone. The activities are not typically part of family life. The category includes hunting, fishing, going to the cinema, dancing, attending parties and restaurants, visiting with friends, reading books, newspapers and magazines, and doing hobbies. We have excluded activities that are less-individualistic, such as watching TV, listening to the radio, going to church and doing voluntary work, which are often done with other family members and/or combined with secondary activities.

Additionally, we include one category for *sleep* (including naps) and a residual category titled *other*, which includes various forms of travel, personal services and grooming, along with non-individual leisure such as watching TV, listening to the radio, attending church, and going on walks/excursions.

Table 1 about here

Table 1 presents descriptive statistics of our Sweden, Norway, and Finland data samples, stratified by gender and wave. The first thing to note is a general tendency of gender convergence of time use in paid work, routine housework, and child care in Sweden. Whereas Swedish men and women decrease their time in paid work across the 1990s, men and women in both Norway and Finland work more with stable gender differentials. Moreover, the gender gap in housework is smaller in Sweden than in the other countries, especially in the later period. Time spent in child care decreased in Sweden and Norway for both men and women, making intuitive sense since both countries experienced significant increases in day care uptake over the period (although the gender gap actually increased in Norway). In Finland, however, men and women increased their child care slightly, which suggests more child care activities taking place at the home. Maintenance housework decreases for men and women in all three countries over the period. Interestingly, for men and women, time spent in individual leisure declines in Norway, yet the opposite occurs in Finland and Sweden. For what little we know about time use during recessionary periods, these individual leisure results match those found in the U.S.

We study the differences between parents and non-parents in time use in Sweden, Norway and Finland in order to get an idea of how parenthood affects time allocation in families

before and after the 1990s. We estimate this by performing multivariate regressions controlling for demographic variables that are likely to influence time use (see Table 2). Our control variables include age and its squared term to allow for linear and non-linear age effects on different time uses. Household type controls are included to differentiate between individuals living in different household contexts, with single households as the reference category. The activity variable indicates the individual's main activity (full-time employed, part-time employed, student, retired, or unemployed). Some Finnish respondents were categorised as both students and part-time workers, who we have defined as students, since our focus is on weekday time use and we deem it most likely that they are students during the week and work part-time during the weekend. We also control for spouse's employment status (full-time, part-time and not in paid work)⁸, which we believe to influence the partner's time use, especially that of parents. Household income is divided into three categories: lowest 25 per cent, middle 50 per cent, and highest 25 per cent.⁹ We also control for the educational level of the individual, categorised as primary, secondary, or higher education.¹⁰

Table 2 about here

Because our concern is how parenthood affects time use differently by gender and over time, we estimate models where gender is interacted with age of youngest child in the household (categorised by no children, youngest child aged 0–4, youngest child aged 5–13 and youngest child aged 13–17). The base effect of age of youngest child indicates the effect for men (reference category for sex), and the interaction provides any additional effect for women.

Many individuals in our data spend no time at all on some activities (see Table 1), violating the normality assumption of ordinary least squares regression. Assuming that the likelihood of

spending time in an activity and actual time spent on that activity are both determined by the same factors, we estimate a (left-censored) Tobit model:

$$y_i^* = \mathbf{x}_i \beta + \mu_i, \quad \mu_i \sim N(0, \sigma^2),$$

where y_i^* is a normally-distributed latent (non-censored) variable. The observable dependent variable y_i equals y_i^* if $y_i^* > 0$ and 0 otherwise (see Long 1997). Our reported coefficients indicate the effects of the explanatory variables (\mathbf{x}_i) on the latent variable y_i^* .

This method provides estimates of period effects on both men's and women's time use, which we estimate separately for Norway and Finland, making comparisons with results from Sweden. As a robustness test, we perform multivariate estimations using a Tobit model and OLS using the same explanatory variables, both with and without weights, finding the OLS estimates yielded highly similar results, but concluding the Tobit model with weights produced the most consistent results.

Results

Table 3 displays Tobit estimates of weekday time use period changes by gender for Norway (2000 vs. 1990) and Finland (1999 vs. 1987) after controlling for aforementioned variables, which we relate to results from Sweden (2000/2001 vs. 1990/1991). It is worth mentioning that the coefficients for men are period effects, while for women they are net effects of period and the interaction between period and gender.

Table 3 about here

For paid work, we find a decrease for both men and women in Sweden and slight increase

for men in Finland, yet we don't find any statistically significant changes in Norway. The decline in Sweden is likely related to the recession, where in the later period a greater tendency to have short-term work contracts and reduced work hours existed. The paid work increase for men in Finland could suggest specialization, or that the intensity of work increased in Finland during the 1990s, as others have suggested (Brandth & Kvande 2006).

Time spent on routine housework declined considerably for men and especially for women, who reduced their time in housework more than men in both Sweden and Finland over the period. This is consistent with the general trend of the time and with findings from other countries. It does not, however, indicate a substitution of housework for paid work, since paid work also declined in Sweden. Period changes regarding Norway housework results are troubled by a slight reclassification of the variable, thus the increases in routine housework and declines in maintenance housework may be overstated. As a test, we collapse routine and maintenance housework to estimate total non-market work performed, finding statistically significant period changes of 10.4 for men and -18.6 for women in Norway, suggesting women's time concerning overall housework duties to have declined while men's have increased. Time spent on child care decreased for men and women in Sweden, but increased for men and women in Finland, and was stable in Norway. These alternative trajectories could be driven by numerous factors, such as differences in public day care uptake or even fertility patterns. In line with post-crisis time use findings in the U.S., in Sweden both leisure and time devoted to other activities increased over the period for men and women.

The main concern of this study is to investigate whether gender equality advanced or stalled during the 1990s. In order to do so we assess the differences between men and women

regarding the impact of parenthood on time use and how it changed during the decade. We estimate models, controlling for the same covariates as listed in Table 2, including an interaction effect of gender and age category of youngest child in the home. The main effect of age of youngest child indicates the base effect for men (being the reference category). The interaction gives the additional effect, if any, for women. To derive the net effect of having a child aged 0 to 4 and being a woman, the base and the interaction effects need to be added. We estimate the periods separately. Tables 4 thru 6 present the effects of parenthood in Sweden, Norway, and Finland.

Tables 4–6 about here

To begin with overall gender differences, as expected, women perform less paid work and more routine housework than men in all three countries in each wave. Women also performed more child care relative to men, and although the results are inconclusive across countries, the general tendency is one towards less leisure among women over time. Overall we see gender differences diminishing slightly over time in most categories.

Our results indicated that parenthood clearly affects the time use of men and women, although unequally. To begin with Sweden (Table 4), we, like Dribe & Stanfors (2009) find no effect of parenthood on time spent in paid work among men in 1990/1991, but women with a child aged 0–4 devoted considerably less time to paid work than otherwise comparable women. In 2000/2001, however, both mothers and fathers spent less time in paid work, though the effect was still larger for women. In line with a traditional division of labour, there was no effect of fatherhood on men's time in routine housework in 1990/1991, whereas there were clear effects of parenthood for mothers with children of all ages (some

fathers even performed less routine housework than otherwise comparable men). In 2000/2001 however, housework increases significantly for fathers of children aged 0–4 and 5–12, while women experienced no additional effect to men in this respect, indicating that both mothers and fathers of children below age 13 devoted more time to housework than otherwise comparable men and women. Parenthood effects in time spent performing child care are, of course, large for both men and women, but decline with the age of the child. In 1990/1991 there was an additional effect for women, indicating that the difference between mothers and non-mothers was significantly bigger than that between fathers and other men. It is interesting to note that these additional effects for women in Sweden almost disappear over time. In 1990/1991 parents of young children had less time for individual leisure, actually more so among fathers than mothers. The additional effect among mothers of young children experienced in the early period disappeared by 2000/2001. Overall, the pattern we observe is that the additional effects experienced by women in 1990/1991 are eased in 2000/2001 in most categories, especially for routine housework and child care.

Moving to Norway (Table 5), there are clear effects of parenthood in 1990 for women; mothers with youngest child aged 0–4 performed considerably less paid work compared to otherwise similar women with no young children; whereas fathers' time in paid work was virtually unaffected. In 2000, parenthood reduced time spent in paid work for men considerably, which is in line with the fact that Norwegian fathers were much more likely to take parental leave by 2000. The additional effect mothers of children under 13 experienced was reduced in year 2000 compared to ten years earlier. The presence of young children increased time in routine housework for both men and women already in 1990. In 1990, there were additional effects for women, indicating that the differences between mothers and other women were greater than differences between fathers of young children and other

men. Yet in 2000, the additional effect was only to be found in the case of women with young children in the household. Relatedly, fathers of older children (5-12 years) devoted more time to housework compared to other men. A similar yet stronger pattern exists for child care, with all parents (obviously) performing more child care than people without children, with a statistically significant bigger difference between mothers and non-mothers than between fathers and non-fathers, more so in 1990 than in 2000. The additional effect experienced by women of older children in 1990 disappeared in 2000.

In sum, although starting off differently around 1990, the results for Norway and Sweden seem to follow the same gender-equalizing pattern by 2000.

In Finland (see Table 6), like Sweden and Norway, we found no effect of parenthood on time spent by men in paid work in 1987, but there was a strong negative effect for women with children aged 0-4. By 1999 this additional effect for mothers also included those with youngest child aged 5-12, who were previously unaffected. These coefficients are larger than the comparative measures in especially Sweden, but also Norway, a possible reflection of Finnish women's lesser tendency to work part-time. Concerning housework, the presence of children increased routine housework for fathers of children aged 5-12 already in 1987, with additional effects for women with children of all ages. By 1999 however, housework increased significantly for fathers of children aged 0-4 and 13-17, and mothers of children aged 13-17 no longer experienced additional effects. In 1987, parenthood affected child care substantially for men and women in Finland, with mothers of young children experiencing additional affects that we don't find for women with older children. By 1999, parents of 0-4 and 13-17 year olds performed more child care than they had compared with 1987, and women with children older than 4 experienced additional effects not observed in the earlier

period. In 1987 parents of young children had less time for individual leisure than comparable non-parents, more so for women than men, yet the additional effects among mothers in the early period were no longer found in 1999. In general, the Finnish results exhibit a similar pattern as the other Nordic countries, where parenthood affected the time use of men and women more similarly by the late 1990s than previously. Yet two differentiations in the Finnish results are that in 1999, mothers of 5-12 year olds faced an additional negative effect on paid work time, and mothers of 5-12 and 13-17 year olds faced an additional effect on child care time, two outcomes which were not observed in 1987 in Finland, nor in the latter period in Sweden. These results make intuitive sense however, considering what we know about Finland's cash for care program and its possible long-term repercussions on female labour force participation.

To learn more about whether post-crisis unemployment is driving our results, as a robustness check we drop the unemployed from our Finnish data and re-estimate our regressions¹¹. Interestingly, no coefficient of interest changes more than marginally, with the exception of small changes concerning the overall gender differentials in paid work, which can be explained because men who are self-classified in our data as unemployed were more likely to perform paid work than were unemployed women. Interestingly, for routine housework and childcare, dropping the unemployed made no changes at all to gender differentials, and for parents it reduced very slightly the housework coefficients only (the employed do slightly less housework as expected). Since the gender and parenthood effects don't change in any significant manner suggests that the unemployed are not biasing our results.

Concluding discussion

This article fills a void in the literature by examining gendered time use and the effects of parenthood and how it changed during the 1990s, after the dust had settled. While few comparative time use studies exist surrounding crisis periods, previous research overwhelmingly supports the notion that parenthood strengthens a more traditional division of labour, whereby fathers specialise in paid work and mothers increase time in housework and child care. It is understood that in Sweden, parenthood affected men and women more similarly by the end of the 1990s than it had a decade earlier. We set out to determine whether this was a unique Swedish phenomenon, perhaps even made possible by a crisis period that enabled the lesser-employed to divide their labour more equally. Alternatively, we ask whether a Nordic pattern is emerging in this period, due more so to underlying societal changes towards gender equality that progress regardless of turbulent times.

Our findings suggest that parenthood clearly strengthened a traditional division of labour in all three countries around 1990, where we found no effect of parenthood on father's time in paid work for any country. Mothers in Sweden, Norway and Finland however performed less paid work, more housework, more child care and in general less leisure than comparable women and compared with men. By the end of the 1990s however, parenthood affected men and women much more equally in each country than it had previously¹². In Sweden, our results show mothers reduced their paid work to a lesser extent than a decade earlier, while fathers reduced their paid work and increased their housework contributions. In Norway, fathers with children of all ages reduced their work hours in 2000; while those with children under 13 increased their time spent performing housework and childcare, outcomes not observed a decade earlier. In general, the Finnish results also support the notion that parenthood affected men and women more equally by the end of the 1990s, as it concerns

time spent performing housework and child care. Fathers in Finland however did not reduce their work hours in the later period, the only country to experience this.

This study uncovered some evidence suggesting that policies in place during crisis periods matter. For example, fathers adjusted their time in paid work much more so in Sweden and Norway in the later period, after both countries had introduced fathers' quotas and male leave uptake had increased. The fact that fathers in Finland did not reduce their work hours in 1999 could be due to the lower uptake of male parental leave compared with Sweden and Norway, which itself may be due to the lack of a father's quota. It is also possible that men in Finland, whose employment situation was dire even still in 1999, felt additional pressure to resist taking parental leave, despite its mandated availability to them. Additionally, the presence of children in the home greatly increased time spent in child care for women as we would assume in all three countries, the effects of which were mediated over time in Norway and Sweden but increased somewhat for mothers with children older than 4 in Finland. Fathers of younger and older children in Finland also experienced this increase however, so these results do not suggest a return to re-traditionalisation. The Sweden and Norway child care results seem indicative of the increasing share of children in public day care in 2000 compared with 1990. Since cash-for-care uptake in Finland was highly gendered in nature, it may partly explain the additional parenthood effects for mothers with youngest child aged 5-12 we found in 1999, who reduced their paid work and performed additional child care, a pattern only observed in our Finnish results. The timing of this policy plays a crucial role here, as it was implemented pre-crisis in Finland, and the crisis intensity itself surely influenced its uptake. Without a counterfactual comparison, it is difficult to speculate if alternative policy measures would have generated different results, yet it seems that the HCA may have had some effect on a particular cohort of women in Finland.

Gender differentials, although declining over time, still show a traditional division of household labours exists, yet parenthood, at least around 2000, cannot be blamed to the same extent as before. That parents in Sweden became considerably less traditional during the 1990s, as did Norway and to a lesser degree Finland, suggests that gender-equality can advance even if the core prerequisites of the dual-earner dual-carer model are temporarily disturbed during a period of economic turbulence, and that the crises themselves are most likely not the primary change agent. If economic crisis and lingering unemployment had enabled Swedish men and women to divide their time more equally, we would have likely found a similar pattern to our results for Sweden and Finland, with a deviating pattern for Norway. We instead find gender equality advanced in a similar pattern in all three countries, albeit to varying extents, with greater changes experienced in Sweden and Norway compared with Finland. What we might learn from the Nordic experience, with Sweden being the forerunner, is not to cut back too drastically on welfare state arrangements that support families and gender equality at the same time, such as day care availability and subsidies, in periods of crisis. Another thing to learn is to be pro-active and initiate gender equal policies, such as fathers' quotas, instead of less difficult and less expensive initiatives such as cash-for-care programs. Our results also support the notion that gender equality develops along regime-type and generational lines, yet certain country-specific results could be due to policy nuances. Further research is however needed. In a future paper, we plan to extend this study to cover the period from 2000 to 2010, and include new countries from other regime types.

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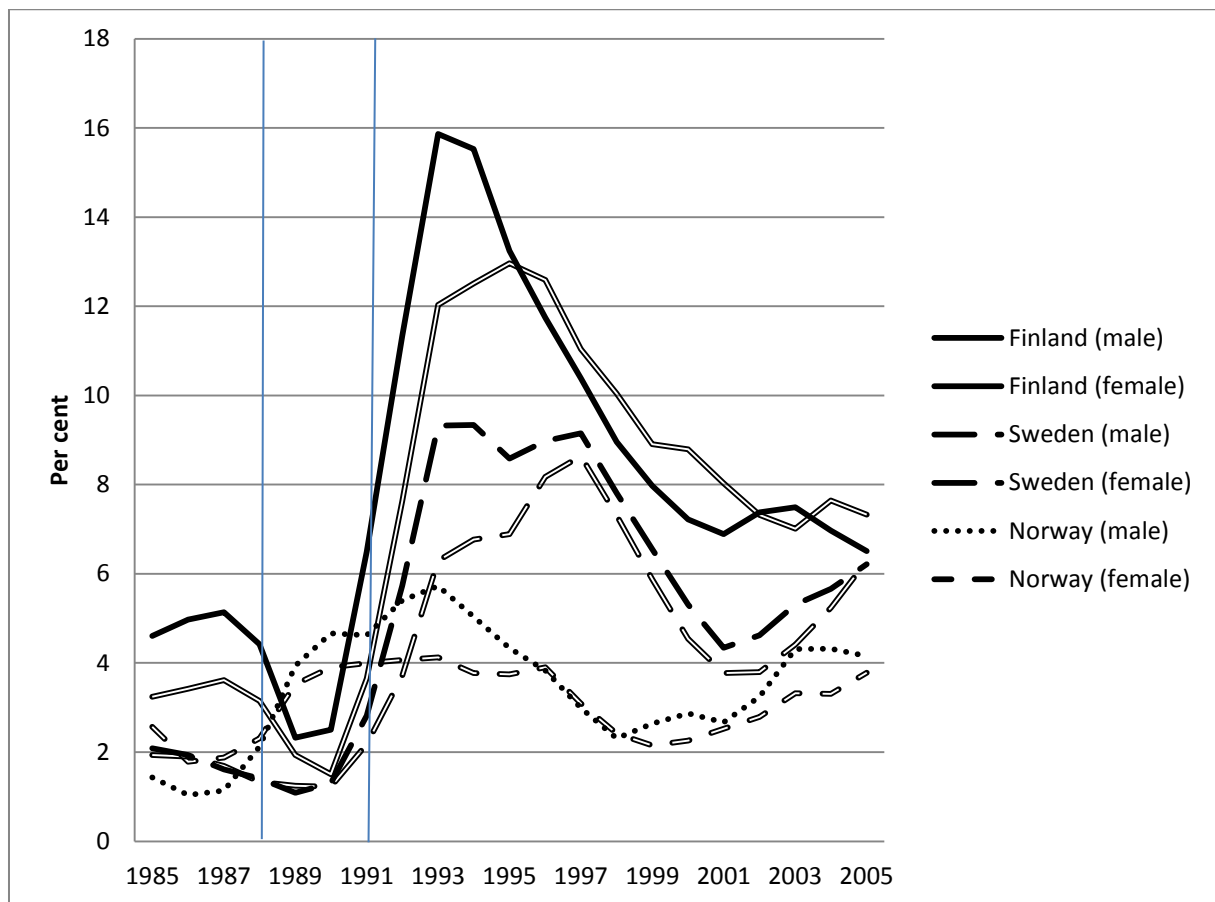
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Figure 1. Unemployment rates for Sweden, Norway, and Finland, 1985 to 2005 (men and women ages 25–54).



Note: Two vertical lines represent the year assigned to the Norway Financial Crisis (1988) and Finland and Sweden Crises (1991).

Source: Data from Labour Force Surveys in Sweden (Statistics Sweden), Norway (Statistics Norway), and Finland (Statistics Finland). Annual data are averages of monthly estimates.

Table 1. Descriptive statistics for total weekday time use by category for Sweden (1990/1991 & 2000/2001), Norway (1990 & 2000), and Finland (1987 & 1999).

Sweden									
		1990– 1991					2000– 2001		
	Men		Women			Men		Women	
	% t=0	Mean (t t>0)	% t=0	Mean (t t>0)		% t=0	Mean (t t>0)	% t=0	Mean (t t>0)
Paid work	20.5	534	37.8	445		27.7	486	42.7	432
Routine housework	9.2	104	1.7	204		17.1	93	4.1	141
Housework maintenance	57.8	89	52.4	60		56.6	87	50.1	58
Child care	75.7	71	59.1	124		74.8	64	57.2	88
Individual leisure	17.2	106	13.7	97		15.0	157	11.9	136
Sleep	0.0	444	0.0	461		0.0	461	0.1	478
Other	0.0	334	0.0	339		0.1	364	0.0	393
N	1,752		1,745			1,467		1,914	
Norway									
		1990					2000		
	Men		Women			Men		Women	
	% t=0	Mean (t t>0)	% t=0	Mean (t t>0)		% t=0	Mean (t t>0)	% t=0	Mean (t t>0)
Paid work	26.0	490	44.7	403		28.7	499	46.9	414
Routine housework	23.5	85	2.8	183		10.2	120	1.4	201
Housework maintenance	43.9	107	43.8	75		66.2	101	73.7	56
Child care	77.9	83	59.3	125		74.6	66	51.9	118
Individual leisure	15.0	148	7.0	152		23.6	120	16.1	112

Norway continued									
Sleep	0.2	462	0.1	479		0.1	459	0.0	476
Other	0.1	348	0.1	327		0.1	375	0.0	380
N	1,645		1,868			1,884		2,236	
Finland									
		1987					1999		
	Men		Women			Men		Women	
		Mean		Mean		Mean		Mean	Mean
	%t=0	(t t>0)	%t=0	(t t>0)		%t=0	(t t>0)	%t=0	(t t>0)
Paid work	27.4	488	38.4	424		32.3	497	45.7	434
Routine housework	13.2	94	1.7	186		17.0	103	2.6	178
Housework maintenance	56.7	103	59.6	69		42.3	88	28.1	59
Child care	84.1	58	70.7	113		81.3	68	67.0	116
Individual leisure	8.8	129	6.4	127		6.4	147	5.6	130
Sleep	0.1	476	0.1	485		0.1	476	0.1	492
Other	0.1	357	0.0	331		0.1	342	0.1	337
N	5,310		5,569			2,344		2,708	

Note: The category 'Other' is a residual including travel to and from work, meals, toilet, personal services, misc. leisure (TV, radio, church, excursions). Mean values in minutes per day and calculated based on individuals with non-zero time spent in activity.

Source: Multinational Time Use Study (MTUS) Version 2006 World 5.5 – release 2.

Table 2. Means of variables used in regressions.

	Sweden 1990/1991	Sweden 2000/2001	Norway 1990	Norway 2000	Finland 1987	Finland 1999
Gender						
Men (ref. cat.)	0.502	0.435	0.475	0.459	0.488	0.467
Women	0.498	0.565	0.525	0.541	0.512	0.533
Age	40.9	41.7	38.8	41.2	39.7	41.8
Age ²	1,819	1,881	1,660	1,844	1,728	1,901
Age of youngest child in household						
None under 18 (ref. cat.)	0.584	0.544	0.550	0.462	0.591	0.591
0–4 years	0.224	0.220	0.235	0.239	0.160	0.139
5–12 years	0.111	0.154	0.114	0.196	0.163	0.169
13–17 years	0.081	0.081	0.101	0.103	0.087	0.101
Household type						
One person household (ref. cat.)	0.175	0.158	0.109	0.131	0.132	0.102
Married/cohab. couple alone	0.283	0.352	0.212	0.233	0.235	0.277
Marr./cohab couple w. others	0.454	0.383	0.524	0.563	0.566	0.488
Other	0.088	0.107	0.154	0.074	0.068	0.133
Activity						
Employed*	0.849	0.812	0.800	0.809	0.781	0.737
Full-time work (ref. cat.)	n.a.	n.a.	0.633	0.585	0.719	0.547
Part-time work	n.a.	n.a.	0.167	0.225	0.062	0.190
Unemployed	0.018	0.003	0.04	0.020	0.025	0.072
Retired	0.044	0.020	0.049	0.095	0.041	0.089
Student	0.037	0.009	0.043	0.032	0.078	0.057
Other	0.052	0.155	0.069	0.043	0.104	0.045

	Sweden 1990/1991	Sweden 2000/2001	Norway 1990	Norway 2000	Finland 1987	Finland 1999
Spouse's employment						
In paid work (ref. cat.)**	0.632	0.588	0.583	0.595	0.578	0.587
Full-time work	0.478	0.479	0.465	0.455	n.a.	0.425
Part-time work	0.154	0.109	0.118	0.142	n.a.	0.161
Not in paid work	0.103	0.124	0.138	0.112	0.149	0.180
Unknown	0.264	0.288	0.279	0.291	0.273	0.234
Household income						
Low 25% (ref. cat.)	0.278	0.221	0.197	0.196	0.176	0.203
Middle 50%	0.451	0.514	0.375	0.545	0.507	0.510
High 25%	0.254	0.265	0.186	0.257	0.318	0.270
Unknown	0.018	0.000	0.243	0.003	0.000	0.017
Educational level						
Primary (ref. cat.)	0.351	0.178	0.149	0.114	0.499	0.249
Secondary	0.417	0.494	0.586	0.549	0.242	0.428
Higher education	0.227	0.314	0.251	0.331	0.259	0.323
Education unknown	0.005	0.014	0.015	0.006	n.a.	n.a
N	3,497	3,381	3,513	4,120	8,042	3,568

Note: *'Employed' is the sum of individuals in full- and part-time work, listed for comparative purposes only and not used in regressions.

** Data on spouse's employment are missing from 1987 Finnish data; we thus regress using the reference category 'Full-time work' for Norway waves and 'In Paid Work' for Finland waves.

Source: See Table 1.

Table 3. Tobit estimates of period changes in weekday time use by gender and country for Sweden (1990/1991 and 2000/2001), Norway (1990 and 2000), and Finland (1987 and 1999).

	Paid work	Routine housework	Maintenance housework	Child care	Individual leisure	Sleep	Other
Sweden 2000/2001 vs. 1990/1991							
Men	-64.1**	-29.4**	-1.0	-19.2**	46.2**	17.9**	27.6**
Women	-42.8	-66.0**	2.7	-26.7	36.5	21.5	58.5**
N	6,878	6,878	6,878	6,878	6,878	6,878	6,878
LR χ^2	3,188	1,836	368	4,526	570	303	1,634
Norway 2000 vs. 1990							
Men*	-0.2	42.6**	-67.9**	-2.2	-44.9**	-2.7	28.9**
Women*	20.8	8.8**	-91.1**	-3.2	-55.7 †	-3.7	59.6**
N	7,633	7,633	7,633	7,633	7,633	7,633	7,633
F-stats	123.0	114.4	23.7	88.6	25.6	18.2	49.6
Finland 1999 vs. 1987							
Men	17.7†	-10.7†	12.4**	25.2**	17.9**	-4.0	-27.2**
Women	-1.7	-23.7**	47.7**	32.7	-3.0**	2.1	-5.3**
N	11,610	11,610	11,610	11,610	11,610	11,610	11,610
F-stats	175.0	154.7	28.8	86.0	25.2	29.1	105.1

Note: Controlling for all variables listed in Table 1.

Strong effects found for Maintenance Housework in Norway are due to classification changes in this variable between surveys (care of adults and other households moved from odd jobs to housework). Combining routine and maintenance housework, we find period effects for Norway of 10.4† (men) and -18.6** (women), for Finland 9.7 (men) and -13.2** (women), and for Sweden -64.0** (men) and -86.3† (women).

† $p < .10$, ** $p < .01$

Source: See Table 1.

Table 4. Interaction between parenthood and gender on weekday time use in different activities by period in Sweden (reference categories in parentheses).

1990/1991	Paid work	Routine housework	Maintenance housework	Child care	Individ. leisure	Sleep	Other
Gender (Men)							
Women	-97.5**	75.6**	-3.6	13.5	-8.1	18.3**	7.4
Age youngest child in household (none < 18)							
0 – 4 years	0.4	-1.7	-2.4	221.5**	-37.0**	-4.5	-26.1†
5 – 12 years	0.1	-11.9	-0.8	149.7**	-31.5**	-5.3	13.7
13 – 17 years	-3.2	-19.8†	17.8	73.2**	-16.5	10.1	9.5
Interaction gender*age of youngest child in household							
Woman × 0 – 4 years	-109.2**	35.2**	-22.0†	62.3**	18.5†	-5.2	-24.4†
Woman × 5 – 12 years	-46.6	36.1**	7.5	34.6*	20.9†	-1.9	-32.8†
Woman × 13 – 17 years	-16.1	30.7**	-16.2	29.1	11.1	-7.7	-11.4
N	3,497	3,497	3,497	3,497	3,497	3,497	3,497
LR χ^2	1,885**	1,174**	226**	2,556**	228**	128**	973**
2000/2001	Paid work	Routine housework	Maintenance housework	Child care	Individ. leisure	Sleep	Other
Gender (Men)							
Women	-80.2**	53.7**	-10.7†	37.2**	-14.5*	13.8**	26.9**
Age youngest child in household (none < 18)							
0 – 4 years	-79.5†	47.7**	8.4	200.6**	-63.8**	15.3	-0.6
5 – 12 years	-53.6	28.7†	-1.6	147.1**	-40.6*	14.6	17.1
13 – 17 years	-43.0	19.0	-9.6	97.6**	-3.1	7.8	-5.2
Interaction gender*age of youngest child in household							
Woman × 0 – 4 years	-95.6**	3.6	3.2	20.9†	9.8	1.9	-12.3**
Woman × 5 – 12 years	-38.4	10.3	21.0	1.2	14.8	-0.6	-29.1†
Woman × 13 – 17 years	-3.2	13.0	23.9	0.2	-36.8*	11.7	1.3
N	3,381	3,381	3,381	3,381	3,381	3,381	3,381
LR χ^2	1,326**	563**	193**	2,092**	191**	167**	675**

Note: Controlling for all variables listed in Table 1.

† $p < .10$, ** $p < .01$

Source: See Table 1.

Table 5. Interaction between parenthood and gender on weekday time use in different activities by period in Norway (reference categories in parentheses).

1990	Paid work	Routine housework	Maintenance housework	Child care	Individ. Leisure	Sleep	Other
Gender (Men)							
Women	-67.1**	84.8**	-20.4**	-8.2	12.4*	5.1	-22.8**
Age youngest child in household (none < 18)							
0–4 years	-35.7	22.3**	-19.9†	205.5**	-7.1	-21.3**	-21.3†
5–12 years	18.8	9.5	-40.3**	151.8**	-19.3	1.3	-14.2
13–17 years	26.5	-7.4	-12.7	60.8**	-5.0	-24.5**	11.7
Interaction gender*age of youngest child in household							
Woman × 0–4 years	-142.5**	31.9**	-14.2	93.1**	-2.2	16.0*	-42.1**
Woman × 5–12 years	-75.0†	36.0**	21.5	45.8*	18.2	-10.8	-15.3
Woman × 13–17 years	-41.3	42.0**	2.4	62.8**	16.3	21.0*	-39.9**
N	3,513	3,513	3,513	3,513	3,513	3,513	3,513
Fstat	67.0**	77.1**	5.4**	55.8**	9.9**	10.0**	20.7**
2000	Paid work	Routine housework	Maintenance housework	Child care	Individ. Leisure	Sleep	Other
Gender (Men)							
Women	-66.7**	63.2**	-48.6**	4.5	-3.5	12.2**	3.5
Age youngest child in household (none < 18)							
0–4 years	-60.2†	18.1†	-2.3	228.9**	-28.3**	-16.8*	-13.9
5–12 years	-66.4**	29.9**	-4.0	164.0**	-4.1	-14.3†	-1.4
13–17 years	-88.2**	9.5	13.8	77.5**	10.1	4.5	27.5
Interaction gender*age of youngest child in household							
Woman × 0–4 years	-116.0**	29.9**	-5.2	86.8**	9.2	-1.0	-42.8**
Woman × 5–12 years	-17.1	14.3	7.9	41.8**	6.8	5.0	-35.0**
Woman × 13–17 years	21.5	14.3	6.8	25.0	0.0	0.6	-34.2†
N	4,120	4,120	4,120	4,120	4,120	4,120	4,120
Fstat	68.1**	43.6**	7.6**	49.1**	9.3**	12.9**	29.6**

Note: Controlling for all variables listed in Table 1.

† $p < .10$, ** $p < .01$

Source: See Table 1.

Table 6. Interaction between parenthood and gender on weekday time use in different activities by period in Finland (reference categories in parentheses).

1987	Paid work	Routine housework	Maintenance housework	Child care	Individ. leisure	Sleep	Other
Gender (Men)							
Women	-58.3**	91.0**	-29.0**	48.2**	1.1	3.6	-27.8**
Age youngest child in household (none < 18)							
0–4 years	7.5	8.0	-8.1	235.4**	-21.8**	-16.9**	-22.6**
5–12 years	-4.3	12.8**	-16.4	171.2**	-10.3	3.2	-10.8
13–17 years	17.9	-7.1	11.5	57.4**	1.5	-14.5†	-7.9
Interaction gender*age of youngest child in household							
Woman × 0–4 years	-151.9**	39.2**	-16.4	75.1**	-13.4†	14.7†	-42.7**
Woman × 5–12 years	-18.1	22.5**	2.4	0.5	13.0†	-5.7	-21.5†
Woman × 13–17 years	-41.6†	41.6**	-5.8	2.9	-11.0	20.1†	-5.5
N	8042	8042	8042	8042	8042	8042	8042
Fstat	131.2**	126.5**	19.1**	57.2**	22.8**	23.7**	79.0**
1999							
Gender (Men)	Paid work	Routine housework	Maintenance housework	Child care	Individ. leisure	Sleep	Other
Women	-70.2**	81.0**	-0.7	39.2**	-18.4**	10.8†	-6.2
Age youngest child in household (none < 18)							
0–4 years	-22.1	19.6*	5.4	279.8**	-34.5**	0.3	-48.3**
5–12 years	-26.5	0.8	4.4	171.6**	-11.3	-1.0	4.6
13–17 years	-25.4	25.4†	-4.5	86.7**	0.3	-1.1	-6.6
Interaction gender*age of youngest child in household							
Woman × 0–4 years	-142.0**	18.7†	-2.7	66.7**	-6.9	2.3	-21.9†
Woman × 5–12 years	-85.6**	51.5**	5.0	34.7†	-0.5	14.4†	-22.5†
Woman × 13–17 years	-7.0	-5.4	2.9	36.5†	3.0	3.4	-0.4
N	3,568	3,568	3,568	3,568	3,568	3,568	3,568
Fstat	71.7**	54.3**	8.1**	41.4**	11.2**	10.7**	41.9**

Note: Controlling for all variables listed in Table 1.

† $p < .10$, ** $p < .01$

Source: See Table 1.

¹ From here forward, this paper will often refer to these waves using the term earlier or later period.

² We do not pretend to establish any causal relationship between crisis and time use. It is beyond the scope of this study and our data don't allow for this.

³ As the Swedish parental leave system is gender neutral, the mother and father are supposed to share and take six months each. However, the sharing is up to the parents to decide. The reform of 1995 made it compulsory for each parent to take at least one month leave or the benefit of that month will be lost. Thus, one month is exclusive for the mother and one for the father.

⁴ The cash-for-care allowance was initiated by the Liberal-Conservative government but abolished by the Social Democrats when they came into power in 1994. Since 2008 it has been optional for local authorities to introduce a cash-for-care allowance, but far from all have done so.

⁵ Through the MTUS data, we do not have access to secondary activities.

⁶ Respondents were surveyed within one year of each other, with the response rate varying from 50 per cent for Norway in 2000 to 75 per cent for Sweden 1990-91. See table 1.

⁷ See Craig (2006) for a thorough discussion on different types of child care activities and gendered aspects of time in child care that may differ quantitatively and qualitatively.

⁸ For our Finnish samples, we use paid work and not in paid work due to missing part- and full-time designations in the 1987 survey data.

⁹ Large percentages of unknown responses to spouse's employment and household income (Norway 1990) make interpreting any results of these two variables problematic.

¹⁰ Comparisons between Norway in Finland in our data set reveal a possible inaccuracy in the harmonization of this variable, but we proceed nonetheless. For a discussion see

http://www.unesco.org/education/information/nfsunesco/doc/iscled_1997.htm

¹¹ We perform this for each wave of the study finding no significant differences. Results not shown but available from authors on request.

¹² Although this paper focuses on weekday time use, this pattern holds true for weekend time use as well, the results of which are available upon request.