FIRST DRAFT

Are There Gendering Effects of a Gender-neutral Parental Leave Policy?

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Abstract

Since 1974, the parental leave policy in Sweden has been gender-neutral in the sense that both mothers and fathers are equally eligible to receive publicly financed benefits for care of children. Even so, Swedish national statistics reveal a clear gender bias in the parental leave in Sweden; the division of parental leave is heavily skewed towards women. In this study we investigate whether the existing policy, in which the pay from the policy is dependent on labor market income, plays a role in the partners' division of leave. More specifically, we study the income cap in the regulation of the program. We use the couple as the unit of analysis and stress the importance of accounting for eligibility regulations in the policy. Using individual-level register data for the years 2005 and 2006 we study the income cap in two different ways. In the first part of the paper, we show that along with the gender differences there also seems to be a clear effect of the income cap on the division of leave days. For example, we show men take the largest share of the leave days in those couples in which the woman have income higher than the cap while their respective partner have income lower than the cap. The results are however contradicted in the second part of the paper in which we turn to study a policy change which raised the income cap by a substantial amount, thus removing these same incentives. The analysis shows that the policy change had no effect on the division of leave. Neither men nor women with an income higher than the cap having a partner with an income lower than the cap increased the number of days taken as a result of this policy change. This indicates that the cap could also to some extent be seen as an arbitrarily chosen income level and the division of leave as the result of a process governed by relative and absolute earnings or other factors that follow income.

Introduction

For more than 35 years ago, Sweden as the first country in the world made a gender-neutral parental leave into law (Haas 1992:14). While being developed over time, the policy of today shows all of the characteristics that are needed if fathers are to use it: it is paid on a high rate of compensation, it is an individual entitlement, and it is flexible (Lewis and Campbell 2007:14). Still, at the aggregate level, the days taken are not shared equally between the parents; the division is heavily skewed towards women. This has been a matter of political concern and a number of reforms have been introduced to address the issue, such as the introduction of one month being reserved for each of the parents, which made it impossible for mothers to take the full leave period, and the recently introduced "gender equality bonus" which gives cash benefits to parents dividing the days more equally.

However, it could also be that the existing gender-neutral parental leave benefits have an impact on the division of leave between the partners due to the benefits being based on labor market earnings. Since one of the most important components in policy-making for gender equity in Sweden is the parental leave system, it would be unfortunate if the policy helped reinforce existing differences between men and women. On the other hand, the parental leave and its usage could just be a reflection of the differences women and men face in the private and public sphere such as differences in the labor market, in household work, etc. This paper will try to disentangle the relationship of the parental leave policy itself and the differences between men and women as shown by the division of parental leave. Is the parental leave policy causing an unequal division of parental leave or is the division of parental leave merely a reflection of the differences between men and women in general?

One intrinsic difficulty in analyzing policy changes within the parental leave is that they are not likely to have any short-run effects. Regular parental leave is planned well in advance before childbirth and, if divided, is most often divided into extensive parts in which the mother almost always takes the first part. Therefore, within the parental leave policy, we choose to study the parental leave benefit for Care of Sick Children (CSC). CSC is a publicly financed benefit which all parents, mothers and fathers, are eligible to use when having to be absent from work to care for a child who cannot attend public childcare due to sickness. It is ideal to study when assessing the division of leave between the partners since children get sick in a random manner and the leave can be taken until the child turns 12, meaning that we can take advantage of longitudinal data. Moreover, due to the involuntary nature of the CSC and the fact that it does by necessity imply a single caregiver[1], it can be said to be a clear-cut case of couples' decision-making process.

Despite the bulk of research on the parental leave, not many studies have been conducted on the CSC as such. Amilon (2007a, 2007b) conducted the first extensive studies on the CSC and reported what variables might influence the sharing of the leave within the household. She uses a model with threat-points that are determined by such factors as educational level, labor market sector, income, and age and concludes that these bargaining powers do in fact have an effect on the division of leave between the partners.

The division of CSC could also be viewed from a perspective of the division of household work. Indeed, taking one day of CSC does in fact imply not just childcare but also traditional household tasks such as cleaning, cooking, and doing dishes. Recent research of Eriksson and Nermo (2009) shows that by comparing the division of CSC with the division of household work as measured by a survey, CSC could in fact be viewed as a proxy of the distribution of household work. Even though the days of CSC in a year are much fewer then the cumulated days on child household work is performed, Eriksson and Nermo show that these are associated with each other. Given that CSC can be added to the list of measures of household work (see Shelton and John 1996:300-302), the results of this study have some implications for the research in the division of household work.

[1] Both parents could be at home when using the parental leave: one on vacation and one on parental leave. This is not the case for the CSC.

References could also be drawn from the CSC to the parental leave since these are likely to be governed by similar factors. Many Nordic studies on the parental leave involve using register data and making cross-sectional estimates of how the mothers' and fathers' different characteristics are correlated with the mothers' or the fathers' use of parental leave (see e.g. Duvander 2006; Bygren and Duvander 2006; Sundström and Duvander 2002). These studies look at the effect of variables such as age, income, education, and different workplace conditions.

In studying not only the division of CSC in a particular year but also the effect of a policy change, this paper goes beyond the static relation and tries to spot the causality in the policy. The policy change being studied occurred in 2006 and raised the maximum compensation per day to a parent who had to be absent from work to take care of his or her child from resembling a monthly income of about 24,800 SEK (~2,500 Euro) to about 33,000 SEK (~3,200 Euro).[2] Since no benefits are given for the part of the income that is above this cap, the cap could be assumed to affect distributional decisions of parental leave for couples with unequal earnings. The policy change was introduced in June 2006 and another policy change in January 2007 changed the cap back to its original level.

Some studies have shown that policy changes in the parental leave could in fact affect the behavior of parents in a more gender equal way (Ekberg et al. 2005; Eriksson 2009). Other studies have shown that the parental leave could even have an effect on the reproductive behavior of parents (Hoem 1993; Andersson 2004; Andersson et al. 2006).

The paper is divided into two parts. The first part investigates couples' distribution of CSC in the years 2005 and 2006 based on the income of the partners relative to the cap. It will stress the role of the eligibility regulations in the policy and only look at couples in which both partners are in fact eligible to take CSC. It will be shown that there seems to be a strong effect of the cap following the income distribution within the couple. The analysis is made possible by detailed register data including the entire population in Sweden, which means that even relatively small subgroups can be studied.

Following the first part of the paper, in which the cap seemed to have an effect on the distribution of leave days, the second part gives an analysis of a change in the policy occurring in 2006. If the unequal distribution of days was due to the economic incentives in the policy, a change in these incentives is likely to cause a distributional change in the leave days taken. The likely effect of a higher cap for couples with unequal earnings, in which the partner with earnings higher than the cap also claims the smallest share of the leave, would then be a more equally distributed leave. The results show no such impact. Neither men nor women with earnings higher than the cap with their respective partners having earnings below increased their number of days used, compared to the distributional change of couples that were left unaffected by the policy change.

[2] These refer to earnings before tax but after social-security contributions are paid. The median wage in the ages 20-64 in Sweden in 2006 was approximately 19.000 SEK (~1.900 Euro).

CSC – Care of Sick Children

The Swedish parental leave program consists of two major parts: parental leave and temporary parental leave for Care of Sick Children (CSC)[3]. The parental leave is the part that is usually meant when mentioning the parental leave program. It is the part that allows parents to take a generous amount of time off from their jobs to care for their children after childbirth. During the leave period, their jobs are guaranteed and they receive nearly full pay. The same goes for the CSC but it is taken when a parent is back at work again and needs to stay home on a working day to care for a child who cannot attend daycare due to sickness or due to being infectious. Since practically all children in Sweden, in all social groups, are in public childcare this type of leave is no marginal phenomenon. The number of days is not restricted in the same way as the parental leave but is based on need. Parents are eligible for CSC until the child turns 12. Up to 120 days of CSC can taken per year in full or divided days. The pay is around 80% of the current income up to the income cap (Swedish Social Insurance Agency 2007; 2008a; 2008b.)

Data from the Swedish Social Insurance Agency show that in 2006, 4.96 million days of CSC for 679.000 children was taken. Population Statistics from Statistics Sweden reveal that 1.30 million children of the ages 0-11 were residing in Sweden in the particular year, meaning that days were taken only for half of the children who by age could make their parents eligible for leave. Of the taken days, an average of 7.3 days was taken per child, 2.7 of them by the father and 4.6 by the mother. Fathers' average participation in the leave has increased gradually over the years, from 33.6% in 1999 to 35.7% in 2007, with a slight trend reversal in 2007.

The pay level for each CSC leave day is calculated according to regulations in the sickness insurance benefit. This type of social insurance has an eligibility criterion based on work; the claimant must receive and be expected to keep receiving income from work as an employee or by being self-employed. The income must be permanent, paid in money, and must also be based on a person's own work. As can be seen from this criterion in the parental leave program, it is obvious that the eligibility regulations in the CSC in particular but also in policies in general need to be stressed (cf. Neyer and Andersson 2008:709). Controlling for the impact of the eligibility regulations on the uptake and the number of days taken is very important.

Moreover, an individual's process of decision about taking days of CSC can of course be properly studied only by individual-level data that allow each parent to be linked to his or her partner. Thus, since our unit of analysis is arguably the couple, we need data on both individuals in the couple in order to correctly estimate the behavior of one individual. Finally, we also need accurate data on individual-level income together with other variables that may affect the eligibility of the policy.

[3] Temporary parental leave does however consist of two other parts as well: ten days in connection with the birth or adoption of a child and contact days for parents of children with a certain disability.

Incentives to share CSC

The possible gendering effects of the Swedish parental leave program come from the economic incentives created by the regulations within the program. Parents and non-parents often report these incentives as one of the major causes of the skewed division of parental leave (Swedish Social Insurance Board 2003, The Swedish Association of Graduate Engineers 2005) but the incentives are also a recurrent issue in the political debate (for example, by the current Minister for Integration and Gender Equality[4]). Since these incentives are likely to vary in size depending on the income of the parent taking the leave they could play a role when parents decide on the division of leave. In the policy, there are two major incentives that work in a quite straightforward manner for couples with unequal earnings. First, the cap plays a difference in that no compensation at all is given for incomes exceeding the cap. If the child is sick for a week and a parent has higher earnings than the cap, the income loss from that week might be substantial. The policy change studied in this paper did however reduce these likely incentives for partners with earnings higher than the cap. The second effect of economic incentives somewhat counteracts the likely effect of the cap change. It stems from the fact that parents on leave generally receive about 80% of their usual pay in compensation for taking CSC. Consequently, the 20% loss in income resembles a larger amount for high-earners than for low-earners. Thus, there are still economic incentives involved even after the policy change. In strict monetary terms, it is still more beneficial for the lowest earner in the couple to take the days of CSC. Other, more indirect, losses such as a foregone career opportunity due to absence from the workplace can however be seen as random and independent of income.

Apart from these economic incentives that might influence the division of leave between the partners there are other effects on how leave is taken that cannot be predicted from income. One effect that makes the parent want to avoid taking a day of CSC may be that it is marked by some job-related disadvantages. Due to the fact that one day of CSC means that the work still has to be done in the majority of workplaces, this holds true even though the pay when taking a day of CSC almost compensates for the income loss of that day. The job needs to be done either by yourself, which means an extra workload sometime in the following weeks or days, or by your colleagues, which of course increases their workload on that day. Even though it is possible to find a substitute for an employee that is absent to take care of a sick child, there are still administrative costs attached to the absence.

This effect is however counteracted by a preference of parents to spend time with children. The CSC gives one parent opportunity to get pay to stay at home with his or her child. Evidence from the literature on work and family reconciliation shows that a high proportion of European mothers and fathers agree that family should be your main priority in life (Hobson and Fahlén 2009). In sum, this discussion implies that the decision on which of the partners will take the day of CSC is not the result of a random process. It is rather a process likely to be governed by some major incentives and preferences: economic incentives depending on income or other factors, the disadvantages absent employees experience, and the advantages parents experience when they are allowed to spend paid leave with their children.

[4] Nyamko Sabuni, April 3, 2007, in an interview with the Swedish radio program 'Ekot'.

Data

The data come mainly from the Swedish population registers but also from other Swedish administrative registers. The population registers contain reliable longitudinal information on the entire resident population of Sweden. These registers have then been linked to different administrative registers where the registers of the Swedish Social Insurance Agency and the Tax Authorities are the most important for this study.[5] Much of the data used in this study, such as income and usage of CSC, has only been available on an annual basis. Since the important variables could only be obtained as annual values, all variables in this study are measured annually at the end of the year. The population for each year is made up of all individuals registered in Sweden on December 31 in the particular year. Thus, this setup provides excellent longitudinal data, allowing us to follow individuals over the years.

As previously mentioned, due to employment requirements in the CSC, the eligibility criterion in the policy is restrictive. In order to study the division of CSC in the couple, the study can only include couples in which both partners are eligible for CSC. Even though this criterion might seem simple, it turns out that it is actually quite selective. When selecting basically couples 1) still living together, 2) with some number of CSC days taken in the studied years (2005 and 2006), 3) that are eligible to CSC through earning income in the labor market and not taking any other social benefits[6], we end up by only selecting 42.668 individuals, or 21.334 couples out of about 1.08 million co-resident parents with children 0-12 years (see the Appendix for a thorough description of the selection process.) Our selection is then basically made up of couples in which both partners' incomes come from work in both the studied years (2005 and 2006). It should however be noted that many of the criteria for selection happen in a random manner but that individuals that regularly receive social benefits are underrepresented in the selection.

Part one: Division of CSC when relating couples' income to the cap

The couples selected are divided into different groups depending on their income in relation to the income cap. This makes up four different groups:

Group 1 – couples in which both the woman and the man have incomes lower than the cap
Group 2 – couples in which the woman has an income lower than the cap and the respective partner has an income higher than the cap
Group 3 – couples in which the woman has income higher than the cap while the partner has income lower than the cap
Group 4 – couples in which both the woman and the man have incomes higher than the cap

Table 1 shows the number of days taken by the women and men in each of these groups for the years 2005 and 2006 and the percentage of men in each group who do not take any leave days at all. We start by simply comparing the division of leave between the groups of couples in one

[5] The particular database used in this paper is called LISA. It contains population registers linked to different administrative registers with information on the sickness, parental, and unemployment benefits. LISA is created by Statistics Sweden for research purposes, is annually updated, and is available from 1990 to 2008; see Statistics Sweden (2008).
[6] This basically rules out all couples with zero-year olds since they are most often on parental leave.

year, say 2005. Group 1 goes in line with national statistics in that the average woman takes more days of leave than their respective partners. Comparing group 1 to group 2 goes in line with previous research (Amilon 2007a) in that the cap seems to have an effect on the division; the division of leave in group 2 is even more heavily skewed towards the women. However, when looking at the third group we also see, contrary to expectation, another effect that follows the cap level. In this group the men do not just take a larger part of the leave than the men in group 1 but also *the largest* part of the leave. Gender does however still have explanatory power in that the division in this group does not mirror that of group 2.

[Table 1 here]

It is also interesting to note that the couples in group 4 take the least number of total days compared to the other groups. Given that there are no variations in infections in the daycare between areas where people with high income live as compared to areas in which people with low income live, these results show that parents are able to find solutions other than turning to the CSC when their children get ill. When comparing the men in this group with the men in group 2 we also note that these men take a higher number of days, a larger percentage of the days, and that a lesser portion of these men does not take any days at all compared to the men in group 2. This suggests that there is reason to also look at the effects of differences in income between the partners and not just level of income per se.

Part two: Did the policy change have an effect on the division of leave?

Model specification

Part one outlined what looked like an effect of the income cap on the division of leave in the different groups of couples. The following part will evaluate the policy change in 2006 that substantially raised the level of the cap, thus removing some of the likely incentives causing the differences in division of leave seen in the first part of our study. The model also allows us to study the significance of the effects.

In order to estimate the effects of the policy change we will take advantage of the specific setup of this particular change. Since only couples in which at least one of the partners had incomes higher than the cap were affected by the policy change, the change could be referred to as a natural experiment. In this 'experiment' the policy change is seen as a *treatment* or intervention affecting some groups and leaving others unaffected. This allows us to compare the differences in outcomes before and after the treatment for groups affected by the intervention to the same difference for unaffected groups. Such a setup is typically known as a difference-in-differences estimation. With an intervention (the policy change) that be seen as random, is conditional on time, and that creates groups with fixed effects the causal relationship of the change can be estimated. The method also allows us to circumvent many of the endogeneity problems that typically arise when making comparisons between heterogeneous individuals (Bertrand et al. 2004).

Our dependent variable is the number of CSC days taken by the man in each couple for individual *i* in year *t.* Since the couples in group 1 are unaffected by the policy change they will function as the baseline in the model. The basic specification assumes that the number of days taken is affected by membership in one of the treatment groups. The treatment groups are therefore marked by binary variables ($GROUP2_{it}$, $GROUP3_{it}$, and $GROUP4_{it}$) that take on the value 1 if the couple is in the specific group in year 2006, otherwise 0. In order to estimate the effects of the policy change we enter interaction dummy variables for each of the treatment groups. The interaction is made with the year dummy $YEAR_t$ that takes on the value 1 for 2006 and 0 for 2005. This gives the model

$$y_{it} = \beta_0 + \delta_1 YEAR_t + \beta_1 GROUP2_{it} + \beta_2 GROUP3_{it} + \beta_3 GROUP4_{it} + \beta_4 GROUP2*YEAR_{it} + \beta_5 GROUP3*YEAR_{it} + \beta_6 GROUP4*YEAR_{it} + a_i + u_{it}, \quad t=1,2$$

in which a_i represents all unobserved time constant factors that affect y_{it}, and u_{it} all the unobserved time-varying factors that affect y_{it}. With such a setup the control group will be represented by the intercept and its time dimension by the year dummy $YEAR_t$. Accordingly, δ_1 will be the general change in CSC days taken over time and β_4, β_5, and β_6 will be the treatment effects for the different groups. These last three coefficients will thus represent the effect of the policy change. We will also run the model adding a number of control variables, $\beta_{6+K}X_K$ where K=1,2…, which are taken days of regular parental leave, age, and education[7] for the woman and the man, respectively, days of CSC taken by the woman, presence of small children (1-3 year olds) and a dummy variable representing larger cities[8].

Estimating the model using pooled OLS would run the risk of giving inconsistent and biased results since our errors u_{it} are serially correlated due to the fact that the same individuals appear in two different years. We therefore estimate the model using random effects. For such an estimation we need to assume that a_i is uncorrelated with each explanatory variable (Baltagi 2001), which seems reasonable in this case. Furthermore, a_i can be considered a random variable since the observations are part of a large population.[9]

The couples in the treatment groups are likely to be affected to different degrees by the policy change depending on the partners' income relative to the cap. The effect is likely to increase with every income unit over the cap. With incomes higher than the new cap the effect is however likely to start decreasing with every income unit. Partners with incomes much higher than the new cap are likely to be unaffected by the change since the pay from CSC is so small compared to their income. The really high earners are excluded because of this reason: see Appendix.

Even though the effect on all treatment groups stays positive, a setup which measures average effects will underestimate a potential effect for some of the couples. It even runs the risk of

[7] More than 14 years of schooling takes on the value 1, otherwise 0.

[8] The most populated municipalities of Stockholm, Gothenburg and Malmö take on the value 1, otherwise 0.

[9] A Hausman test with 99% significance and a Breusch-Pagan LM test for random effects also points to the accuracy of a model with random effects.

giving insignificant effects even if they would exist in some groups. As can be seen later on, this does not seem to be the case for our study.

Results of the estimation of the model

Table 4 presents the results of the empirical estimation of the model. The dependent variable is the number of CSC days taken by the man for each year. The model is estimated using Huber and White standard errors.[10]

[Table 2 here]

The coefficients of interest are those on the interaction of the treatment groups and year. These indicate whether the policy change had an impact on the men's use of CSC for the treatment groups compared to the control group. As we can see, the estimates on these interaction effects are all significant. If we start by looking at group 2, in which the men have incomes higher than the cap while their respective partners have incomes lower than the cap, and group 3, in which the women have incomes higher than the cap while their respective partners have incomes lower than the cap, we see that the estimates are positive for the former but negative for the latter. Even though all of the groups increased their days taken, as can be seen by the difference between δ_1 and the group time effects, the increase was smaller for group 2 and larger for group 3. This fact obviously calls for the importance of using a control group. In other words, the men in group 2 did *decrease* their amount of days taken compared to the control group while the men in group 3 *increased* their number of days taken compared to the control group. Consequently, these results are opposite to those we would expect to find if the policy change would in fact have played a role in the division of leave within the couple. We thus see no indications of the policy change having any effect on the leave distribution within the couple.

The results in Table 4 also show that the differences in CSC days taken in 2005 between the treatment groups and the control group are significant for group 2 and 3. On average, the men with an income higher than the cap who have partners with income lower than the cap take significantly fewer days than the men in the control group. The effect is opposite for the men with an income lower than the cap with partners with income higher than the cap; these men do on average take a significantly larger amount of days than the men in the control group.

Adding the control variables to the second model does not change the results for our variables of interest. The days of regular parental leave taken by the father should be seen as a control for if fathers have taken days of regular parental leave instead of CSC. The same goes for the days of CSC taken by the mothers; it is included as a control for the relative number of days.
The results for the two models are stable across other model specifications as well.[11]

[10] The usage of the robust standard errors is due to indications that the variance of the errors where non-constant (heteroscedasticity). This was corrected using the robust standard errors, even though the significance of the coefficients did not change to any appreciable extent.

[11] Other estimations include pooled OLS and tobit-regressions.

Conclusions

This study starts by pointing out that it is necessary to treat the couple as the unit of analysis in research on the uptake and usage of parental leave. The partners influence each other in a multitude of ways but the most important for the parental leave and especially the part of the parental leave that is used for care of sick children (CSC) is the eligibility regulations in the policy. These regulations are restrictive in that the benefits are based on income in the labor market, meaning that parents are not eligible for the leave unless they receive an income. This study gives an impression of how careful one needs to be in interpreting national statistics when looking at a couple's decision-making process that is governed by strong eligibility regulations.

Using register data covering the entire population we were able to analyze couples in which both partners were eligible to take CSC. Moreover, due to our large data, even relatively small subgroups could be studied.

Since the gender wage gap is still a reality in today's Sweden, a policy in which the pay is based on labor market income is likely to affect the division of leave between partners with differences in their earnings. This study specifically analyzed the effect of the income cap in the Swedish parental leave policy. Since no pay at all is given for the part of the income that is higher than the cap, this cap is likely to affect divisions of CSC for couples in which one of the partners have an income that is higher than the cap and the other one do not. If the case is that this person is more likely to be a man, the policy would have gendering effects on couples with unequal earning of this kind.

The results of the study are mixed as regards these gendering effects. On the one hand, we see that dividing couples into different groups depending on the partners' income relative to the cap produces groups with very different patterns of CSC use. Couples in which the partners both have incomes lower than the cap show the division usually depicted in national statistics; the men do on average take the smaller part of the leave. In couples in which the man has income higher than the cap while their respective partner have income lower than the cap there seems to be an effect of the cap. These couples seem affected in the decision-making process in that they have an even more skewed division of leave than others. Moreover, the couples in the small group in which the woman has an income higher than the cap while their partner has income lower than the cap do on average take the smaller part of the leave. Given that CSC can be seen as a proxy of household work, these findings contrast previous research that shows that women do the majority of the work (Evertsson and Nermo 2004:1272). The results are also interesting in relation to the 'doing gender' approach since they suggest that gender seems to play a less important role than income (cf. West and Zimmerman 1987). These results also suggest an effect of the cap in the parental leave regulation. Recall however that we by this comparison cannot tell if it is the actual cap that causes the effect or if the cap rather works as a random income level that affects the leave distribution. We also cannot tell if the association is caused by income itself or some other factors that are related to income. But, if the cap is the cause of these skewed divisions of leave between the partners the parental leave policy would in itself actually reinforce patterns that it is supposed to counteract.

On the other hand, the results from the second part of the study show that when the incentives, pointed out as the cause of a particular pattern of dividing parental leave, are partly removed by a substantial raise in the cap, the division of leave stands unaffected. By using a method in which we control for changes that would have occurred even without the policy change, we see that none of the groups in which one of the partners had income higher than the cap changed their behavior accordingly as compared to a control group which was unaffected by the change. Neither men nor women with an income higher than the cap increased their share of days taken as a result of the policy change. These results complement those from the first part of the study. Maybe it is not just the cap that is actually causing the unequal sharing of the CSC. Dividing the groups according to the positioning of incomes in relation to the cap might also reflect the division of leave according to some other factors that follow from income. The cap could in this case just be seen as an arbitrarily chosen income level, from which the couples are divided into different groups. To some extent, the division of leave is thus likely to be a result of the policy but also a reflection of the partners' relative incomes or other factors that follow income. On the other hand, it could also be that the period in which the change was in effect was too short to actually cause a behavioral change. The change would maybe have had long-term effects that would have shown up if the cap had not been changed back to its original level the subsequent year.

When putting the results in the light of the sociological relative resources perspective, it is obvious that the results could point to a situation in which the partners use their relative resources to bargain away the housework. In this analysis, the relative resources are measured by income, but income could also be seen as an aggregate of other possessed resources such as education and age. Gender could also be included as a component in the income, but from the comparisons of the different groups it does not necessarily seem to be as strong as usually predicted. Interpreting the results by relative resources does however assume that parents do not prefer to stay home to care for their children and thus that the influence of disadvantages as an employee and the economic incentives are stronger than the effect of preferences for childcare.

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Table 1. Descriptive statistics for all income groups

			Both below the cap	**Only man above the cap**	**Only woman above the cap**	**Both above the cap**
			Freq	*Freq*	*Freq*	*Freq*
Average number of CSC days taken	Women	2005	5.60 (5.41)	5.64 (5.12)	3.56 (4.43)	3.91 (3.83)
		2006	7.30 (7.02)	7.31 (6.82)	4.07 (5.48)	4.43 (4.32)
		Change 2006	*30%*	*30%*	*14%*	*13%*
	Men	2005	3.15 (3.97)	1.72 (2.71)	4.08 (4.41)	2.43 (3.27)
		2006	4.16 (5.10)	2.02 (3.22)	5.49 (5.75)	2.80 (3.76)
		Change 2006	*32%*	*17%*	*34%*	*15%*
Percentage of men with no uptake		2005	31.76	51.22	20.07	37.96
		2006	27.96	51.48	16.38	39.57
		Change 2006	*-12%*	*1%*	*-18%*	*4%*
Number of couples			7425	11186	922	3290

Standard deviation in parentheses.

Table 2. *Model estimation of number of days of CSC taken for men in 2005 and 2006. Estimated with random effects and robust standard errors.*

		Estimates Model 1	**Estimates Model 2**
β_0	Intercept	2.710***	3.753***
		(0.090)	(0.450)
δ_1	$YEAR_t$	0.822***	0.885***
		(0.111)	(0.114)
β_1	$GROUP2_{it}$	-0.989***	-0.940***
		(0.106)	(0.106)
β_2	$GROUP3_{it}$	0.620*	0.770**
		(0.364)	(0.362)
β_3	$GROUP4_{it}$	-0.277	-0.132
		(0.199)	(0.204)
β_4	$GROUP2*YEAR_{it}$	-0.490***	-0.523***
		(0.131)	(0.131)
β_5	$GROUP3*YEAR_{it}$	1.073**	1.085**
		(0.462)	(0.461)
β_6	$GROUP4*YEAR_{it}$	-0.377*	-0.341
		(0.215)	(0.215)
β_7	Age of woman		-0.045***
			(0.119)
β_8	The man's taken days of parental leave		0.016**
			(0.006)
β_9	The woman's taken days of CSC		0.062***
			(0.009)
β_{10}	Presence of small children 1-3 years old		0.446***
			(0.118)
β_{11}	Dwelling in a larger city		0.352**
			(0.152)
	R-squared	0.065	0.090

***: Significant at the 0.01 level
**: Significant at the 0.05 level
*: Significant at the 0.10 level

In which the different groups are:
Group 1 – couples in which both the woman and the man have incomes lower than the cap
Group 2 – couples in which the woman has income lower than the cap and the man has income higher than the cap
Group 3 – couples in which the woman has income higher than the cap while the man has income lower than the cap
Group 4 – couples in which both the women and the men have incomes higher than the cap

Appendix – Selection procedure

	n
Total population above age 16 in 2006 in Sweden	**7,434,191**
Number of parents with children 0-12 years	**1,276,389**
Number of parents in existing couples of opposite sex	**1,080,938**
Number of obs not eligible to CSC	434,062
Subgroups (overlapping):	
Uses sickness insurance benefits	*146,526*
Enrolled in education	*93,802*
In military service	*22*
Uses childcare allowance	*17,679*
Annual income of less than ~100 Euro	*170,952*
Unemployed full time	*130,050*
Unemployed part time	*35,392*
Retired due to sickness	*24,912*
Retired	*12,576*
Number of obs left	**646,876**
Selection due to methodological issues	193,627
Subgroups (overlapping):	
Employed in the state sector (receiving extra benefits in addition to CSC)	*37,593*
Self-employed	*6,246*
Changed workplace during the studied years	*166,243*
Number of obs left	**453,249**
Partners of those excluded above	244,803
Number of obs left	**208,446**
Selection of families:	112,108
Subgroups (overlapping):	
Families with 0-year old children (on parental leave)	*30,708*
Families taking more than 40 days of parental leave	*80,696*
Couples with no uptake	*35,918*
Very high incomes (higher than ~80,000 Euro)	*312*
More than 30 days of CSC taken in each of the years	*7,026*
Number of obs left	**96,338**
Number of obs not eligible in both years	53,670
Number of obs left	**42,668**