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MATERNITY LEAVE AND PAYMENT FOR CHILDCARE, IMPACT ON THE ECONOMIC SITUATION OF A MARRIED COUPLE IN DENMARK, SWEDEN, NORWAY, FINLAND, GREAT BRITAIN, AND GERMANY

RESEARCH DEPARTMENT OF SOCIAL POLICY AND WELFARE

Maternity Leave and Payment for Childcare, Impact on the Economic Situation of a Married Couple in Denmark, Sweden, Norway, Finland, Great Britain, and Germany

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Abstract.

The birth of a child has a huge impact on the economic situation of a family and welfare states across Europe differ in the way they support the family in case of this event.
This paper applies microsimulation to illustrate the impact of different family situations on the economic situation of families in 6 European countries. It compares the situation of families at different income levels and in distinctly different situations: First, the paper looks at the economic situation of the family after the birth of a child with one parent on paid leave. Second, the paper illustrates the impact of day care costs on the economic situation of the family after the expiration of the leave scheme and the return of both spouses to work. Furthermore, to analyse and compare the transitions from one family situation to the next, the paper also presents time graphs showing the changing economic situation for the respective families over a time period 2 years after the child's birth.

Contents

1. Introduction.

How does the birth of a child influence a family? We could apply many different angles to this question. However, in this paper we examine the impact of this event on the *economic situation* of the family in six European countries: Denmark, Sweden, Norway, Finland, Great Britain and Germany.
European welfare states differ in the ways in which they support families. In this paper we focus on two important core features, namely paid leave schemes and public childcare. Both areas have in recent years gained the interest of the public, policy makers and researchers. Our aim is to provide a detailed overview and description on the different schemes in force in our country cases in 2003.

In this paper we use a microsimulation approach to illustrate the impact of leave schemes and childcare on the economic situation of model families in the six countries.
Our approach helps us to focus on three dimensions: First, in the country sections (section 3.1 to 3.6) we illustrate the impact of leave schemes and childcare costs on the economic situation of the family at different income levels in the different countries. Often the analysis of e.g. leave schemes does not consider that those schemes have a rather different impact on families at different income levels. Therefore, our analysis adds an important brick to the puzzle by showing the treatment of *different* families – according to income – under the same scheme.
Second, also in the country sections, we add a time dimension to our analysis. We do not only analyse the impact of one single scheme but the impact of the *transition* of the family through different schemes and from and into the labour market, i.e. from and into paid work. Also this transition dimension is rarely captured in studies on different welfare schemes.
Third, the detailed description and simulation of the economic situation of model families in all the six countries allows us to *compare* our measure – the disposable income of the family in different situations – across countries. We do that in the final, the comparison section of the paper (section 5).

When looking at the impact of the leave schemes and the costs of childcare we suggest distinguishing between the isolated effect and the transition effect.
The isolated effect only considers the direct impact of the relevant scheme for the family, i.e. the impact of maternity and parental leave and the costs of childcare. The 'transition effect' includes a broader look at the changing disposable income of the family that gets a child, i.e. it considers the effects of the transition from a situation without children to a situation with children. We provide a more detailed explanation on the two concepts in the comparison section (section 5).

All our simulations and thereby our comparisons build on a model-family approach. In this paper we use a married couple having their first child as the model family and vary the family's gross income. We give further details to the model family and the income concept applied in section 2. Results for other family types also including single parents are available on www.sfi.dk/sw20973.asp.

2. The model.

2.1 Basic assumptions and definitions.

We consider maternity leave benefits only for the time after delivery and assume the mother to use her maximum rights for leave and benefits. We leave out the pre-natal maternity leaves, which is up to 6 weeks in some countries.
Payment for childcare is for full time care, i.e. approximately 40 hours /week from the end of the maternity/parental leave.

The focus in our transition graphs is first, on the transition from work for both spouses to having a child where primarily the mother is on maternity leave while the father works. If the father has separate rights we include these and look in that case at the situations of the family with respectively both spouses, the mother alone or the father alone on leave. We allocate leave rights, which are to be shared to the mother exclusively.
Second, we focus in the transition graphs on the transition from maternity/parental leave to work for both spouses while the child attends public day care. In all countries we model childcare for the youngest age group.

This study follows thereby the family's transition from work over maternity/parental leave to work and childcare. This transition covers in our country cases a period of two years until the child is two years old. However, Germany is an exception. Here we look at three years, due to the long parental leave scheme available in 2003.

We apply in this paper the national regulations of the year 2003. An alternative interpretation is that our model family goes through the mentioned transitions in different countries and in 2003.

Maternity/parental leave schemes vary in length across the countries, in this study the impact is measured for as long as the benefit periods last. Furthermore, day care is of varying quality across the countries. This study concentrates on the dimension of daily opening hours, i.e. the number of hours the child is being cared for in the institution. We assume full time care, i.e. so many hours per day, that both spouses can have a full time job. Childcare is comparable across countries according to this dimension but not necessarily according to other quality dimensions.
We select pay schemes for childcare according to the national information available, which may be country average, capital of the country or a specific state in the country. This will have to be remembered when we interpret our results. More detail will be given in the country specific sections on maternity leave and childcare schemes.

The next step is to specify the economic situation of the family, i.e. define our measure that we apply to compare the model family's economic situation under different schemes.

2.2 The economic situation of the couple.

The married couple has been selected to represent the families having children and using childcare in this study. The focus of this paper is on the first child because this event is a very fundamental change in the life of a family. Having child number two is more or less a repetition of having the first as far as maternity leave regulation is concerned. For childcare there will often be rebates for

siblings. A separate working paper therefore deals with the situation when the couple also has two and three children attending childcare.

Our initial situation is one where both spouses are in employment. It is assumed that one of the spouses, here it is the wife, earns 80 percent of the gross wage income of the other spouse. The income will vary in small steps from a combined level of 0.54 APW income (0.3 + 0.24) to a level of 3.6 APW income (2.0 + 1.6). The APW is OECD's 'Average Production Worker'; cf. 'Taxing Wages', an annual publication of the OECD. The housing costs of our model family vary with the combined gross income of the couple, i.e. they are 20 percent of the combined gross wage income. These housing costs remain unchanged, also when one or both of the parents are on maternity/parental leave and later when they both work and the child attends a day care institution. The interpretation is, that the parents stay in the flat they had before they got a child. The family may be eligible for housing benefits and if so, these are included in the calculation of the economic situation. Net income would probably be a better decision variable for housing costs, but the gross wage income was, as mentioned, applied in this study. This assumption can be changed in future studies.

The economic situation of the working family without children consists of two components, net income (gross income minus taxes and social contributions) and net housing costs (gross housing costs minus housing benefits). The income concept used to measure the economic situation is called the 'Family Purse' (F.P.) and is calculated in the following way:

Gross wage income
- Taxes and social contributions
- Gross housing costs
+ Housing benefits

Family Purse

This income concept is relatively simple, but it contains the most important aspects of the economic situation of the married couple.

The situation where one or both parents are on maternity/parental leave is easy to include in the F.P. calculation. Gross wage income is replaced by the relevant mix of wage income and leave benefits. Furthermore, we include the child benefits in the calculation of the F.P..

When the maternity/parental leave expires both parents return to work. The child attends public day care, which is charging the parents for this service. The 'Family Purse' calculation now looks like this:

Gross wage income
- Taxes and social contributions
- Gross housing costs
+ Housing costs
+ Child benefits
- Net payments for childcare

Family Purse

Net payments for childcare may be gross payments minus direct subsidies. The subsidies may also take the form of tax allowances or tax credits and will then be included in the tax calculation. This may also be the case for child benefits. This has no consequence for the outcome of the F.P., but it has an impact on which of the components, the contribution to combined marginal effects originates from, when this type of analysis is made (forthcoming SFI working paper on marginal effects).

3. Maternity leave schemes and payment for childcare.

3.1 Denmark.

Maternity/parental leave: The combined leave is 52 weeks, of these 48 after delivery. Of the 48 weeks the first 14 weeks immediately after delivery are for the mother, 2 weeks are for the father and these 2 weeks can be taken together with the mother. The remaining 32 weeks can be shared between the spouses.

In this study the mother has 46 weeks of leave, the first 2 weeks after delivery together with the father. This is the situation when the mother uses her maximum rights.

The compensation is 100% of the lost gross income after deduction of the general 8% social contribution up to a maximum benefit of 3,113 DKK/week. On a net basis the compensation is a little lower due to higher social contribution for supplementary pensions when the income source is maternity benefits. This simplified description of the scheme is based on full time work for both spouses (37 hours/week), which may be unrealistic for very low incomes.

Childcare: The average rate for childcare in a nursery (age 0-2 years, both ages included) is 2,742 DKK/month in 2003. This is a country wide average for parents paying the full price.
However, parents with low incomes can receive a subsidy. If the combined personal income (income concept used for taxation) is 121,000 DKK (annual basis) or lower, there is no payment for day care. For income between 121,000 and 123,678 DKK the payment is 5% of the rate. One percentage point is added to the 'payment percentage' for each income increase of 2,678 DKK above 123,678 DKK. Full rate, 100%, is paid for personal income above 375,400 DKK.

3.2 Sweden.

Maternity/parental leave: The combined leave is for 480 calendar days plus 10 separate days for the father. 390 of the 480 days and the 10 days for the father are compensated by an income related benefit, 90 days by a flat rate benefit. Each of the parents has a right to ½ of the leave (480 days), 60 days are earmarked for each of the spouses and the rest can be shared if the parents want to do so. We assume here that 28 days of the leave are for the mother before delivery.

In this study, where the mother uses her maximum rights we allocate the leave (translated into weeks) in the following way: The first 1½ weeks after delivery are for both of the parents, then 41½ weeks follow for the mother alone and then 8½ weeks for the father alone. This exhausts the ordinary maternity/parental leave of 53 weeks after delivery. Finally the mother has 13 weeks of leave with a flat rate benefit.

The 390 + 10 days are compensated by 80% of the former gross income calculated on a calendar day basis, i.e. current gross income in 2003 up to the usual ceiling which is 7.5 times the 'basic amount' of 38,600 SEK, i.e. 289,500 SEK in 2003, divided by 365. The minimum compensation in this period is 150 SEK/day. The flat rate benefit for the last 90 days is 60 SEK/day.

Childcare: The general payment scheme for 'full time care' sets the parents' payment at 3 % of the combined gross income for the first child, 2% for the second and 1% for the third child. There is no payment for child number 4 and more. The maximum amounts, which according to the 'maxtaxa' scheme has to be paid in 2003, is 1,140 SEK/month for the first child, 760 SEK/month for the second child and 380 SEK/month for the third child. The payment is assumed to be for 12 months a year. Children in the age bracket 4-5 years have a right for 525 hours free preschool a year. This is not relevant for this study, which covers the time span until the child turns two.

3.3 Norway.

Maternity/parental leave: The combined leave is 42 weeks, of these 39 weeks after delivery, at full compensation. The parents can choose 80% of this compensation and thereby extend the leave to 49 weeks after delivery. We use this case for this study. The first 6 weeks after delivery are for the mother alone, followed by 39 weeks, which can be shared. The father also has 4 weeks, which have to be placed after the 6 weeks for the mother. The allocation in this study is 6 weeks plus 39 weeks for the mother, together 45 weeks, i.e. the maximum rights for the mother. The 4 weeks for the father are allocated after the 45 weeks for the mother. The father also has a right for 2 weeks leave close to and after delivery but without compensation. This time is the only possibility for both parents to be on leave together. This option is not included here because only compensated leave is considered in this study. The 3 weeks gap between the end of the leave and the 1 year birthday of the child is assumed to be covered by the mother on vacation (and her holyday pay is assumed to be equal to the maternity leave benefit).

The parental leave benefit compensates the family at 100% of the former wage income up to a maximum of 6 times the basic amount. The basic amount is 55,964 NOK in 2003. We use 80% of the full compensation. The maternity/parental leave benefits are taxed and levied by social contributions just as wage income.

Childcare: There is considerable variation for most dimensions of Norwegian childcare in 2003, resulting in difficulties designing a model. The following is therefore not a precise reflection of the 2003 situation, but a construction, which is in reasonable accordance with regulations implemented from 2004. We assume that the rate for full time care varies between 1,000 NOK/month and 3,000 NOK/month for the 'first' child. The payment is for 11 months a year. The child has to be 1 year old before attending day care.

Payment for childcare is assumed to be dependent on the family's personal income (personal income is an income concept used for taxation):

In the interval 100,000 – 120,000 NOK the full rate increases by 25 NOK for each income increase of 1,000 NOK. The rate stays at 1,500 NOK/month up to an income of 200,000 NOK.

In the interval 200,000 – 220,000 NOK the rate increases from 1,500 to 2,000 NOK/month. The rate stays at this level up to an income of 300,000 NOK.

In the interval 300,000 – 320,000 NOK the rate increases from 2,000 to 2,500 NOK/month. The rate stays at this level up to an income of 400,000 NOK.

In the interval 400,000 – 420,000 NOK the rate increases from 2,500 to 3,000 NOK/month, and the rate stays there for income above 420,000 NOK.

There is a siblings rebate of 1/3 for each additional child.

Norway has an alternative to childcare, i.e. 'kontantstønad', a cash benefit for parents not using day care. We do not include the benefit in this study, but results for this case are available on our project's website.

3.4 Finland.

Maternity/parental leave: The combined total leave is for 293 weekdays (6 days a week). The allocation possibilities are the following:

The mother is entitled to 105 weekdays, the father is entitled to 18+12 weekdays and there are 158 weekdays to share. The +12 weekdays are 'extras' for the father, but only if he takes the 12 of the ordinary 18 weekdays in the end of the leave. The father can take his 18 weekdays together with the mother. We assume that 24 weekdays are before delivery. The allocation where the mother uses her maximum rights is the following:

The mother has 105 – 24 + 158 = 239 weekdays, 40 weeks after delivery. The father has 1 week after delivery together with the mother and 4 weeks leave after the 40 weeks for the mother. This gives 45 weeks of leave over 44 calendar weeks.

The maternity benefit is calculated just as the Finnish sickness benefits. The base income for the calculations is the annual gross wage income minus 4.8%. The daily (weekday basis) benefit is calculated in this way:

Annual base income in the interval 4,905 – 26,124 EUR: 0.7 x base/300.

Annual base income in the interval 26,124 – 40,192 EUR: 60.96 + 0.4(base – 26,124)/300.

Annual base income above 40,192 EUR: 79.72 + 0.25(base – 40,192)/300.

The minimum for the daily compensation is 11.45 EUR.

Childcare: Payment for childcare depends on the gross income of the parents and the family size. There are limits for how much to pay. The general pay scheme is the following:

Family size	Lower income limit	Payment percentage
2	918 EUR/month	11.5
3	1,132 EUR/month	9.4
4 and more	1,344 EUR/month	7.9

The payment percentage is applied to gross income above the lower income limits. Payment below 18 EUR/month is not collected.

The maximum payment for the youngest child is 200 EUR/month. For a second child it is 80 EUR/month. For further children the maximum payment is 20% of the maximum for the youngest child, i.e. 40 EUR/month.

An example: A couple with 3 children in day care and a monthly income of 2,000 EUR.

Payment: 0.079 x (2,000- 89 – 1,344) = 44.79 EUR/month/child.

This rate is o.k. for the youngest and the second child but too high for the third (max = 40 EUR/month). Total payment: 2 x 44.79 + 40 = 129.58 EUR/month. The 89 EUR is an additional deduction when there are 3 children or more in the family.

Finland has an alternative to childcare, namely the cash benefit ‘hemvårdstød’, for parents not using childcare. We do not include this possibility in this study, but results for this case are available on the project’s website.

3.5 Great Britain.

Maternity/parental leave: The combined leave has a maximum duration of 28 weeks, 24 of these are assumed to be after delivery. Of the 24 weeks after delivery 22 are for the mother and 2 are for the father. The 2 weeks for the father must be placed within 8 weeks after delivery.

In this study the mother has 22 weeks of leave, the first 2 weeks after delivery together with the father. This assumption also constitutes the case where the mother uses her maximum rights.

The compensation lies at 90% of the former gross income for the first 6 weeks (2 weeks after delivery) of the leave for the mother. For the remaining 20 weeks of leave the compensation lies at 90% of the gross income with a ceiling of 100 GBP/month. The compensation for the father is also 90% of the gross income with the ceiling at 100 GBP/month.

Childcare: Great Britain does not have a national pay scheme for childcare and there is considerable variation in the actual payments across the country. A rate of 2.50 GBP/hour is, however, mentioned in an official document, and we use this rate to estimate a payment of 100 GBP/week for 40 hours of childcare for our model.
Payment for childcare is not subsidized directly, but the ‘Working Tax Credit’ scheme (WTC) has a ‘childcare element’. This element compensates 70% of the payment for childcare up to a ceiling of 94.50 GBP/week for 1 child, 140 GBP/week for 2 and more children attending day care. The ceilings are for the ‘childcare element’. You could also say that the government compensates the

family for 70% of the childcare costs up to a level of 135 GBP/week for 1 child and 200 GBP/week for 2 and more children.
The 'childcare element' is, however, being tapered for increasing income. The tapering starts at an income level above 5,060 GBP (annual income) in 2003. The taper is 37%. First the 'basic' element, the 'couple's' element and the '30 hours' element (if there is one), all components of the WTC scheme, have to be tapered to zero. Only then the tapering of the 'childcare' element starts.

3.6 Germany.

Maternity/parental leave: The maternity leave is for a total of 14 weeks, of these 8 weeks after delivery. There is no paternity leave and there are no weeks to share. The mother has the 8 weeks alone after delivery.

The maternity leave benefit is 13 EUR/day, but this amount is 'topped-up' to the usual net wage (without a ceiling) by the employer. In the model we use the mother's previous net income to calculate the benefit. The net replacement rate is 100%. The maternity leave benefit, 'Mutterschaftsgeld', is not taxable income, it is already a net income, but it is used together with other taxable income to find the working parent's tax rate in the German splitting system (Progressionsvorbehalt).

Germany has a parental leave scheme, 'Erziehungsgeld', which both parents are entitled to use. There are two versions of the scheme. The 'standard' version implies a benefit of 307 EUR/month until the child turns two. The 'Budget' version implies a benefit of 460 EUR/month until the child turns one. We only model the 'standard' variant here.

To receive the 'Erziehungsgeld' parents have to meet the criteria of an income test: The net income relevant for calculation of the income relevant for the means test is gross wage income minus 27%. For the first 6 months the income limit for the net income of the couple is 51,130 EUR, for lone parents the limit is 38,350 EUR. For net incomes above these limits the benefits cannot be received. From the 7^{th} month the limits are 16,470 EUR and 13,498 EUR respectively. If the income is above these limits the benefit is tapered by 4.2% of the income above the limit.

The 'Erziehungsgeld' scheme starts when the child is born but the benefit is reduced to zero by the 'Mutterschaftsgeld'. The 6 months-limit refers to the child's birth.

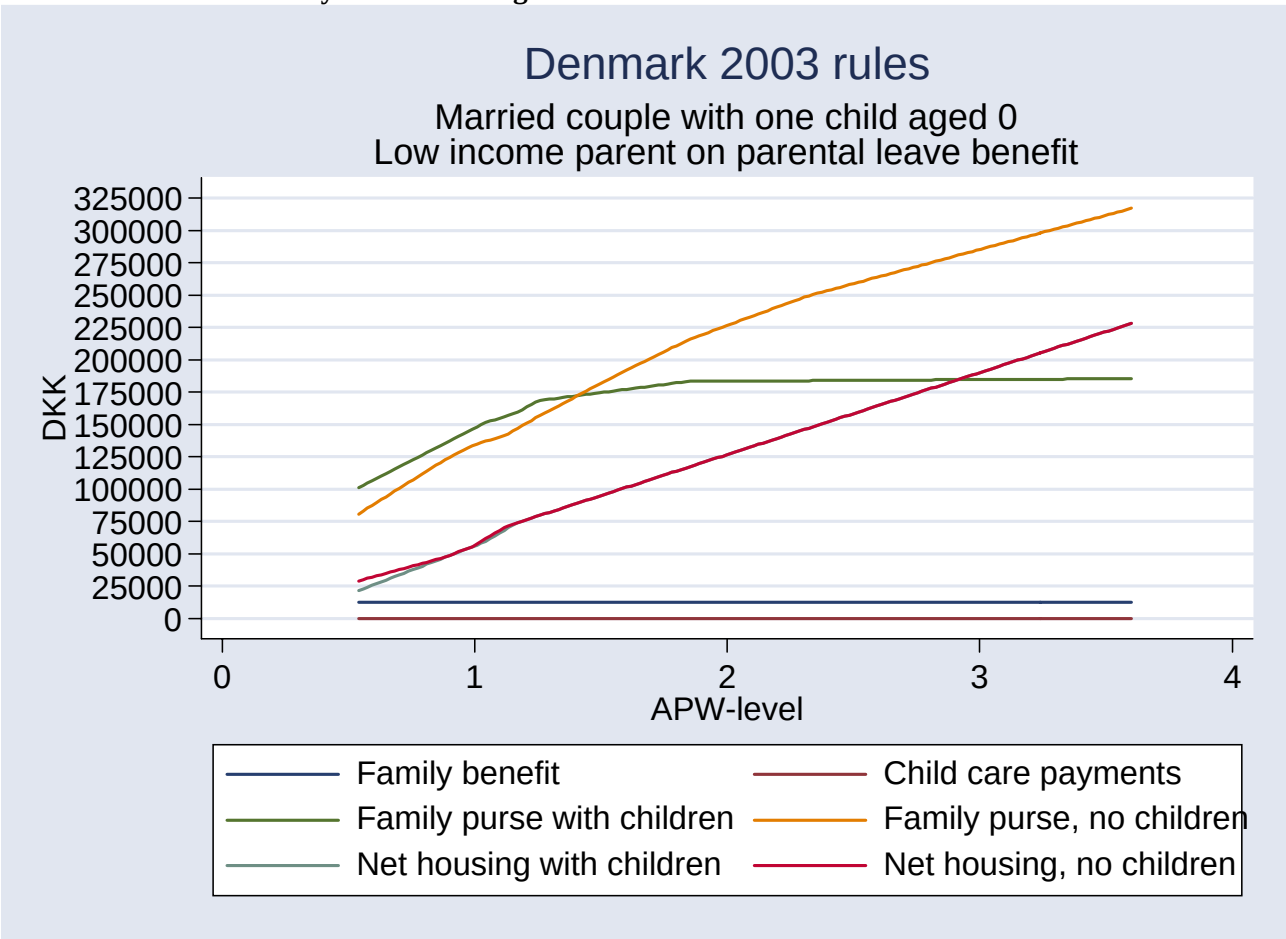
Childcare: Childcare pay schemes vary considerably across Germany. We use the scheme in Nordrhein-Westfalen for this study. The payment is here related to gross income and is only for the first child, any following children are free of charge. The user charges are income related and increase for higher incomes. For a child in the age group 0-3 years there is no payment if the family's gross income is below or equal to 12,271 EUR (annual basis). For a gross income up to 24,542 EUR the monthly payment is 68 EUR. For income up to 36,813 EUR the monthly payment is 141.12 EUR, for income up to 49,084 EUR it is 208.61 EUR/month, for income up to 61,355 EUR it is 276.61 EUR/month and for income above 61,355 EUR it is 312.91 EUR/month. The gross income includes wages, maintenance payments and housing benefits, but not child benefits. Tax allowances are deducted if there are 3 or more children in the family. The pay scheme has a distinct stepwise profile with increasing income, implying significant marginal effects when the income thresholds are passed.

4. Country situations.

The following sections present our results for the six countries. They show the impact of the leave schemes and childcare costs on the economic situation of families along the income distribution. Furthermore, the sections concentrate on the transition of the families through different situations.

4.1 Denmark.

Graph DK1. Family purse for a married couple working and without children and for the couple when the mother is on maternity leave receiving benefits.



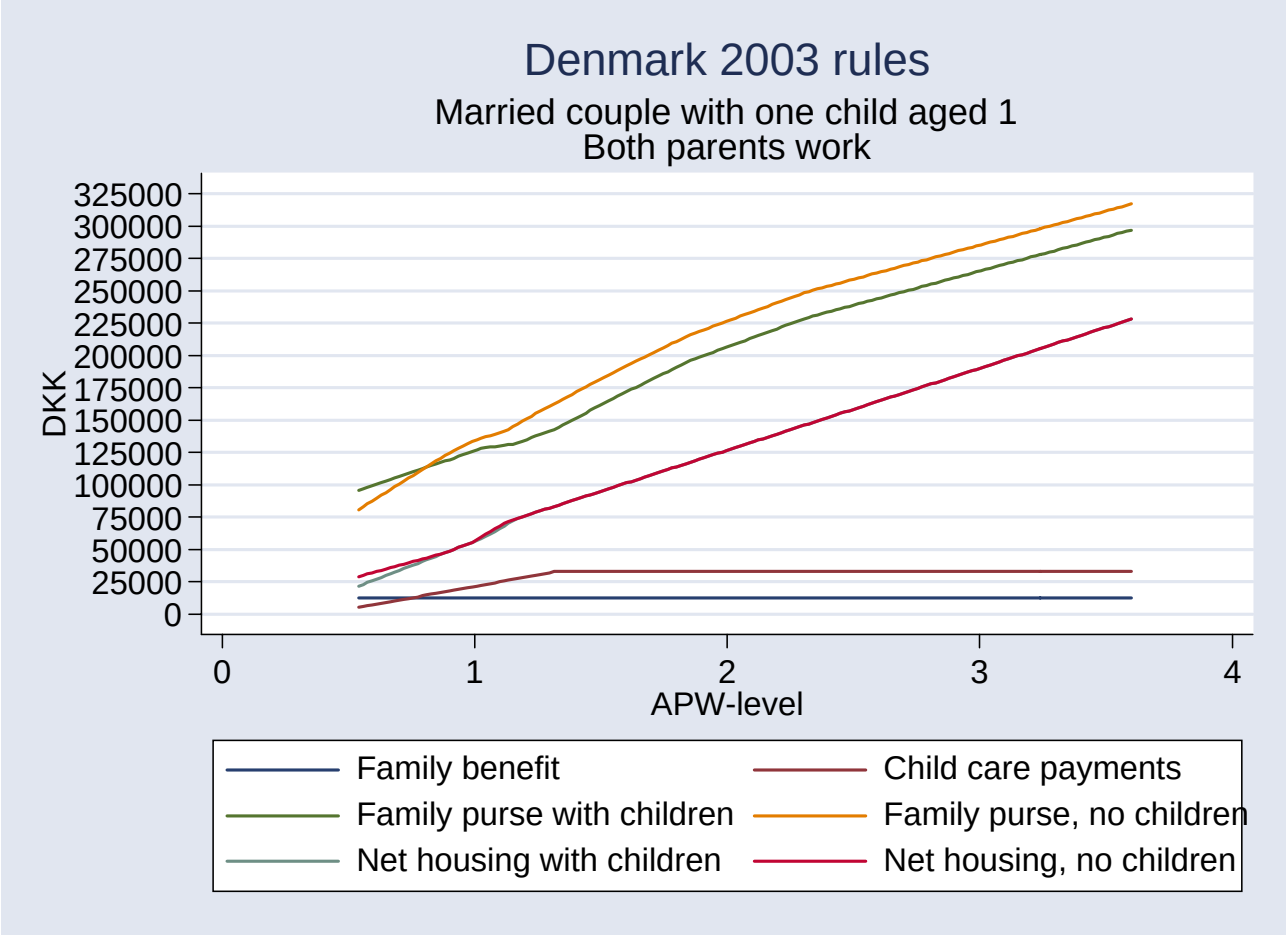
The yellow curve is the 'Family Purse' when both spouses work and without children. The red curve illustrates the net housing costs in this situation; they have been deducted in the calculation of the F.P.

The green curve is the F.P. of the family when the mother is on maternity leave receiving benefits while the father is working. The grey curve is the net housing costs of the family in this situation. It is below the corresponding red curve for the family without children at low income levels because housing benefits are more generous for families with children than for families without. Finally the dark blue line represents the child benefits the parents receive.

The green curve is above the yellow one up to a combined former income level of approx. 1.4 APW. The family with a child and the mother receiving maternity benefits is financially better off than the family working and without children. There are three reasons for that: First, the maternity leave benefit for the mother almost fully compensates her lost income up to a level of approx. 0.5 APW, where the benefit reaches its maximum (it is at a combined income of approx. 1.2 times that of the APW). Second, the housing benefit is higher for the family with children and third, the child benefits also contribute to the result. However, also the claims on the F.P. have increased, now as also the costs of having a child exist. When the combined former income is above approx. 1.8 times that of the APW the green curve becomes horizontal; the income of the father continues to increase but so do the housing costs. For higher income levels the couple without children has an increasingly larger F.P. than the family with a child, at an income level of 3.6 times that of the APW the difference is approx. 140,000 DKK.

Graph DK2 illustrates the situation with both parents in work and the child in a day care institution.

Graph DK2. Family purse for a married couple working and without children as well as with a child attending day care.



The yellow curve illustrates again the ‘Family Purse’ for the working family without children.

The green curve now illustrates the situation where both spouses work and the child attends day care, a service the parents are paying for. For low income levels the payment is subsidized totally or partly.

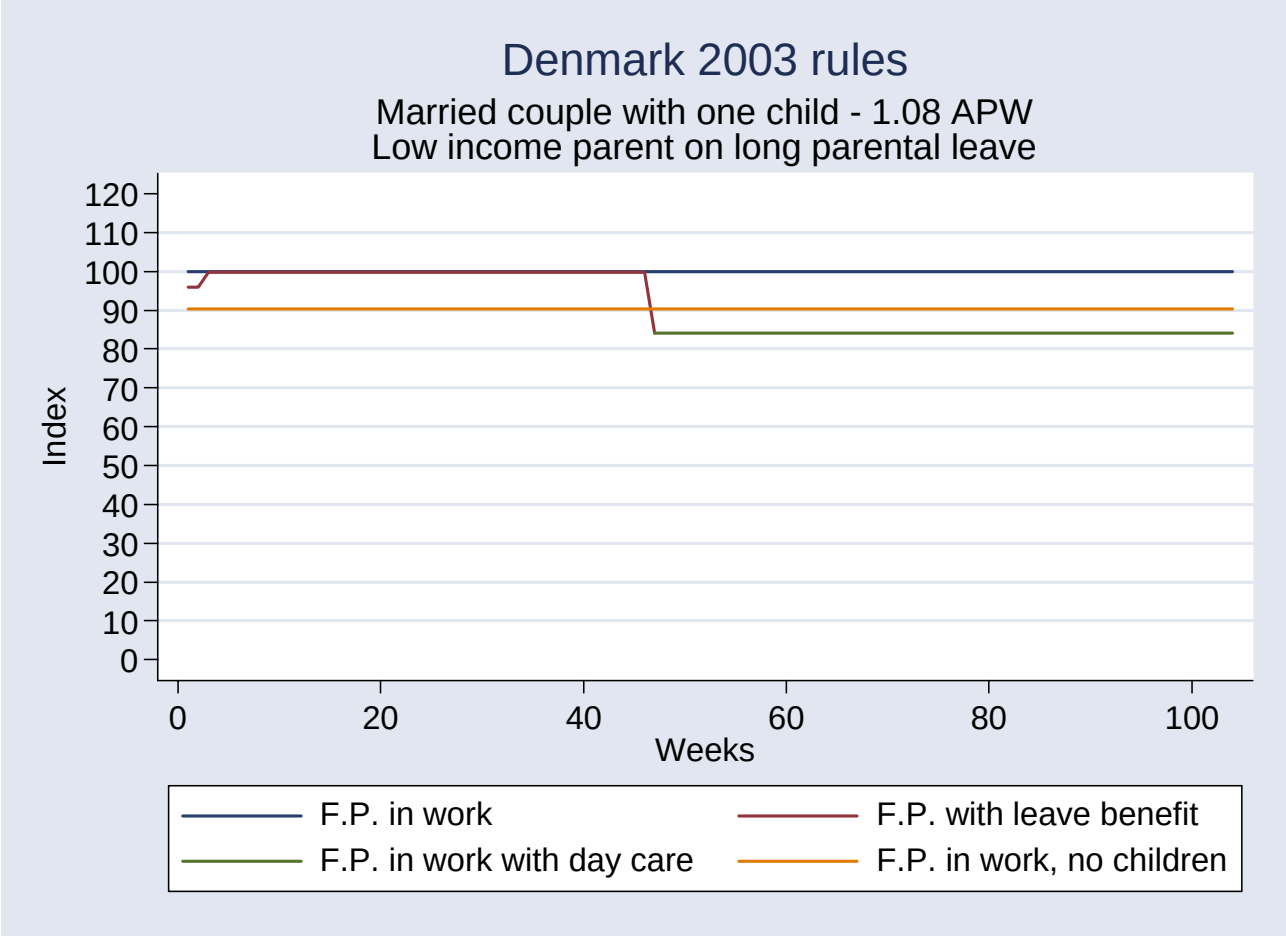
For low income levels the green curve is located above the yellow one. The higher housing benefits for families with children contribute to this result as do the child benefits and the subsidized payment for childcare, here represented by the dark red curve. For higher income levels the F.P. of the family without children is larger than the F.P. for a family with a child by an amount which is equal to the difference between the payment (full rate) and the child benefits, i.e. approx. 20,000 DKK.

Graph DK1 and DK2 contain F.P. curves for working families without children, families with a child where the mother is on maternity leave and working families where the child is attending day care. The objective is now to illustrate the transition from the first situation to the last. Thus, we use 'time dimension' graphs at selected income levels.

The 'time dimension' illustrates the situation during the length of the maternity/parental leave and the situation when the parents work and the child is attending day care. For Denmark the time dimension graphs cover a period of 2 years, for Germany it will, for reasons already mentioned, be 3 years. The selected income levels are from the lowest level compatible with full time employment (assumed to be 1.08 (0.6 + 0.48) APW income) over 1.80 and 2.7 to 3.6 APW.

The first 'time dimension' graph for Denmark is Graph DK3 at the 1.08 APW income level.

Graph DK3. Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for childcare. 1.08 APW income level.



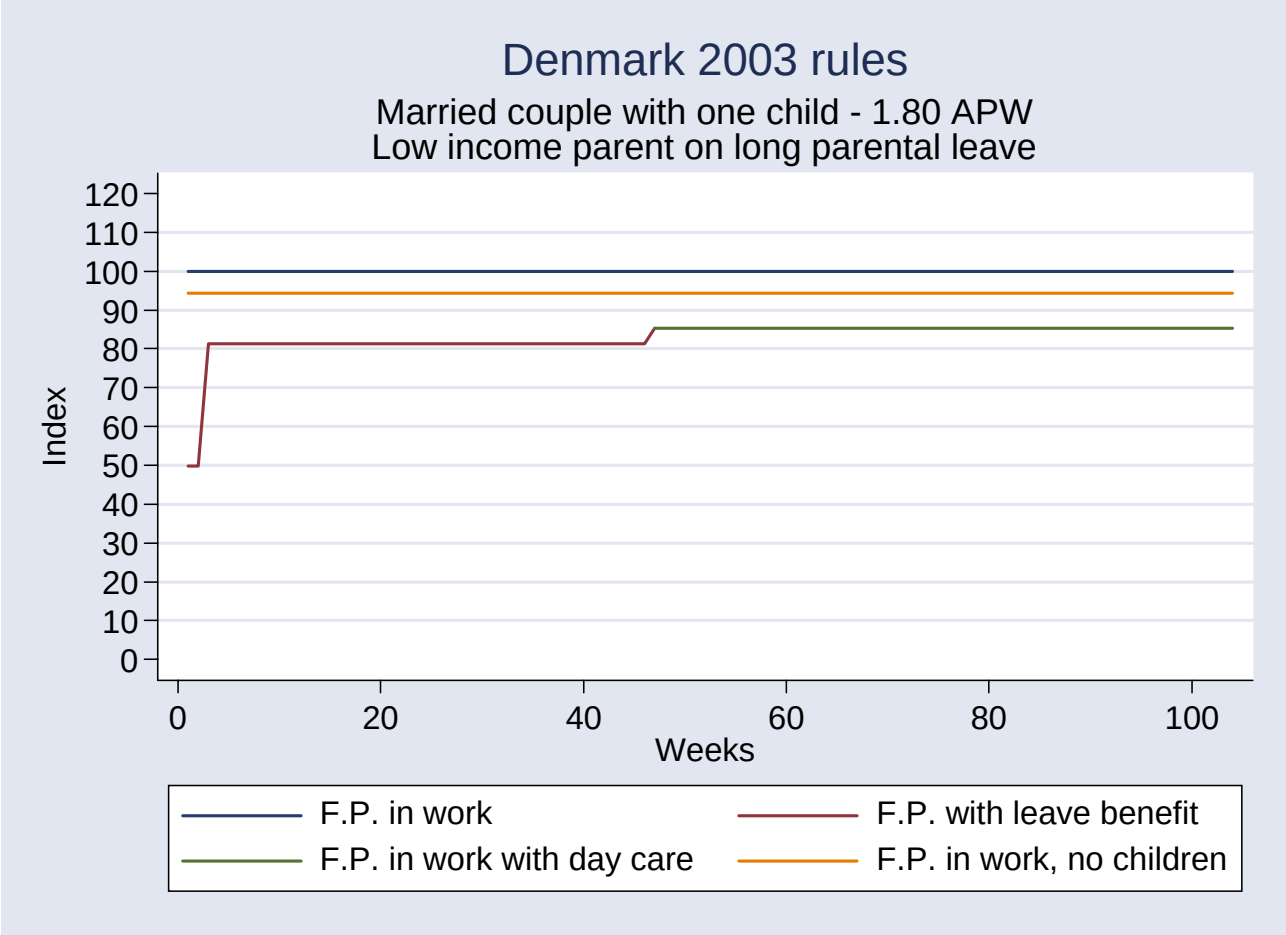
The overall reference line for all time dimension graphs (dark blue = 100) is the F.P. of the working family with a child not attending childcare. In other words we compare our model family in different situation to the case of the family having a child and working but not paying for childcare. This reference line is primarily used to assess the isolated impacts from maternity leave and payment for childcare. All other curves are set in relation to this overall reference F.P., i.e. the reference F.P. is set at 100 and the family's F.P. in different situations is related to this.
The yellow line is the F.P of the working family with no children at a combined income of 1.08 APW. It is obtained by measuring the vertical distance to the yellow curve at a combined income level of 1.08 APW in Graph DK1 or DK2. This vertical distance is then related to the corresponding vertical distance in the reference case (not shown in Graph DK1 and DK2). The yellow line is used to assess the overall impacts of the transitions from work to maternity leave and back to work, now also using childcare. For a more detailed explanation of 'isolated impacts or effects' and 'transition effects', cf. the introduction and section 5 ('Comparisons').

The first 2 weeks of the red curve illustrates the case where both parents attend leave at the same time just after delivery. Then 44 weeks where the mother is on maternity leave follow. In these 44 weeks the F.P. of the family is close to being identical to the reference F.P. because both families receive child benefits, and the maternity benefit almost fully compensates the lost wage income of the mother (but not for the father, cf. the first two weeks). None of the families have costs for childcare. The F.P. situation on maternity/parental leave is better than the in work situation (by 10.4%) as we have already seen from the comments to Graph DK1. It should, again, be remembered that the claims on the F.P. have increased in the situation where the family has got a child.

When the maternity/parental leave is over the mother returns to work and the child attends day care. The F.P. of the family in this situation (dark green line) is 15.8% lower than that of the reference family and 6.8% lower than the F.P of the working family without children. The family is not paying full rate for day care at this income level, but the payment is substantially higher than the child benefits.

The next graph illustrates the transition of the family at a combined income level of 1.8 APW.

Graph DK4. Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for childcare. 1.8 APW income level.

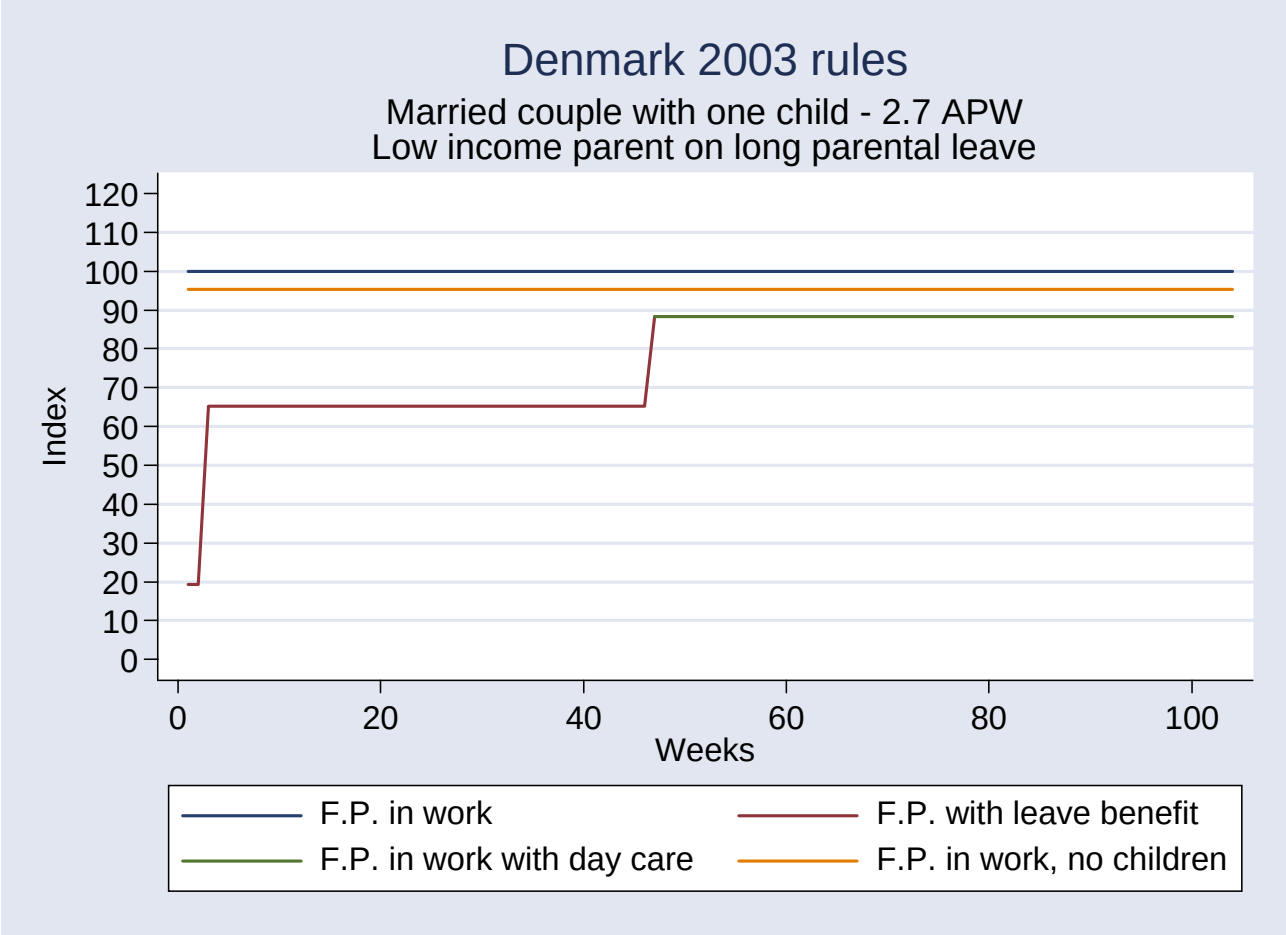


The F.P. situation for the family at this income level is now worse during maternity/parental leave than for the working family without children. During the 44 weeks of maternity leave for the mother the F.P. for the family is 18.6% lower than the reference F.P. and 13.7% below the F.P. of the working family without children. The maternity benefit reaches its maximum at an income level a little above 0.5 APW for the mother; here her income is 0.8 APW. In the situation with day care the F.P. is 14.7% lower than the reference F.P. and 9.5% lower than the one for the working family without children. The family pays full rate for day care at this income level.

The F.P. in the childcare situation is reduced by 14.7% compared to 15.8% in the 1.08 APW income case, a small reduction in relative impact. Measured in relation to the F.P. of the working family without children there is an enlarging negative impact from 6.8% to 9.5%. The reason is that in the 1.80 APW income situation the F.P. for the working family without children has moved closer to the reference F.P. both absolutely and in relative terms. This ‘gap closing’ movement in relative terms continues for increasing income levels.

Graph DK5 illustrates the situation at the 2.7 APW income level.

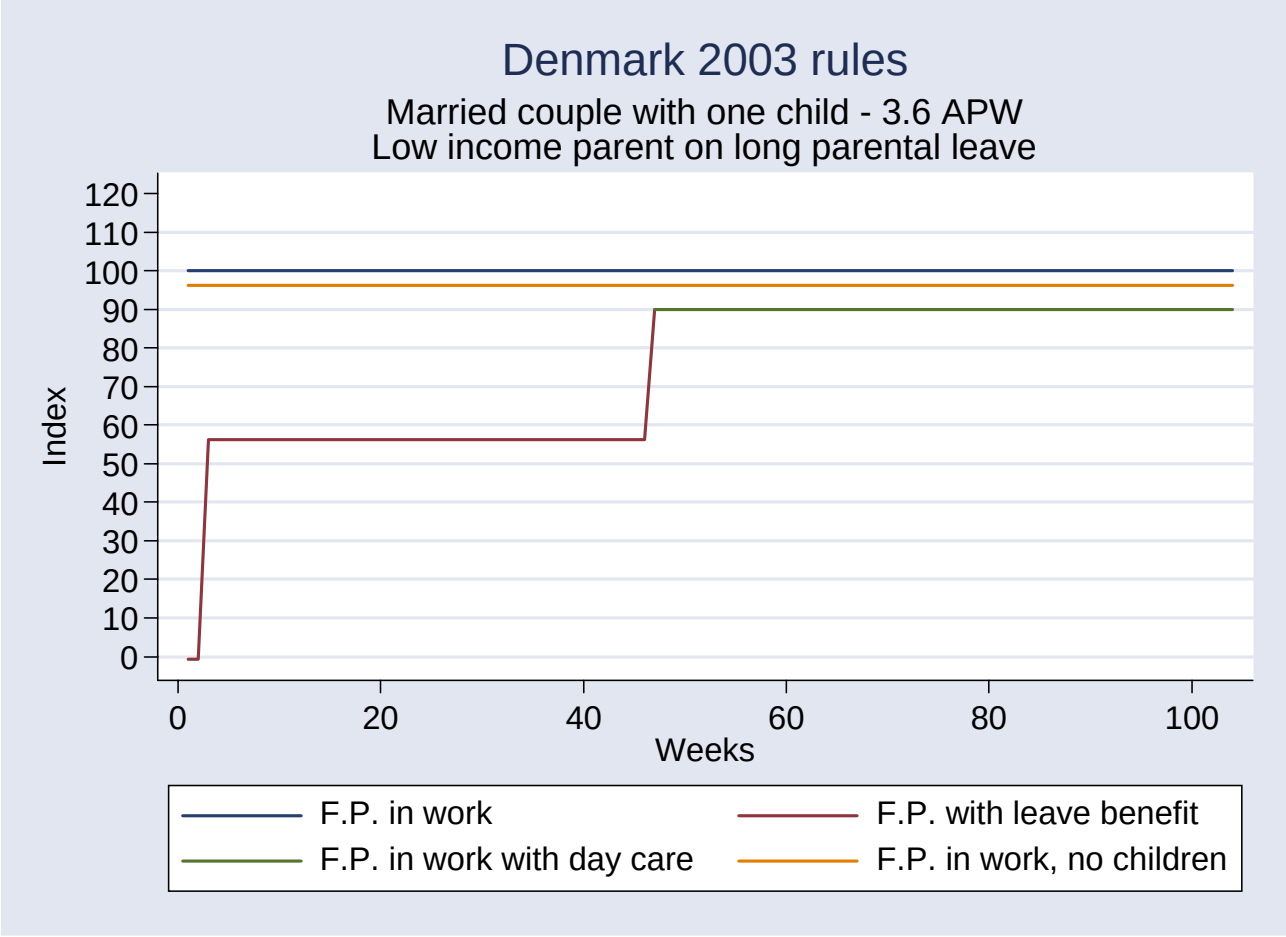
Graph DK5.Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for childcare. 2.7 APW income level.



At this income level the F.P. situation of the family on maternity/parental leave continues to deteriorate, it is now 34.7% lower than the reference F.P. and 31.6% lower than the F.P. of the working family without children. The negative impact from using childcare is, as should be expected when the full price level has been reached, relatively diminishing with increasing income; the loss is now 11.7% measured in relation to the reference F.P. and 7.4% in relation to the working family without children.

The last income level illustrated is the 3.6 APW income level contained in Graph DK6.

Graph DK6.Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for childcare. 3.6 APW income level.



The F.P. position of the family on maternity leave is now 43.8% below the reference F.P. and 41.5% below that of the working family without children. In the childcare situation the negative impact is now reduced to 10.0% of the F.P. of the reference family and 6.3% of the F.P. of the working family without children.

Table DK1 summarizes the results for the Danish case.

Table DK1. Impact on family purse (F.P) from maternity leave and payment for childcare. Percent

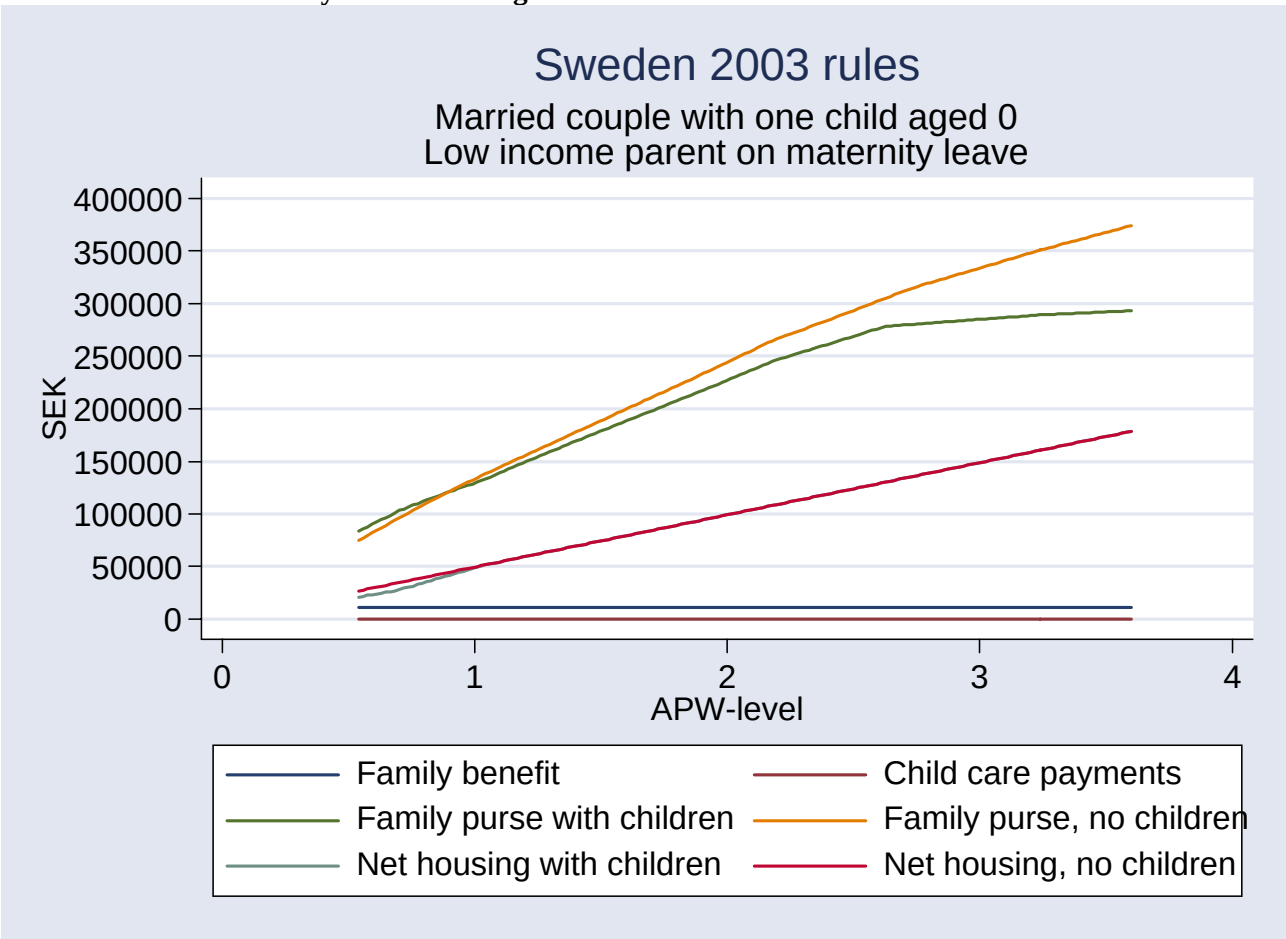
APW level	Reference family (isolated effects)		Working family, no children (transition effects)	
	Maternity	Childcare	Maternity	Childcare
1.08	-0.2	-15.8	+10.4	-6.8
1.8	-18.6	-14.7	-13.7	-9.5
2.7	-34.7	-11.7	-31.6	-7.4
3.6	-43.8	-10.0	-41.5	-6.3

The family at the lowest income level gains 10.4% when the mother is on maternity leave compared to the F.P. of the working family without children. It is, however, evident that the negative impact from maternity benefits is increasing after these have reached their maximum level (at the combined 1.2 APW income level). The losses become quite substantial at medium to high income levels, 41.5% measured in relation to the F.P. of the working family without children at the 3.6 APW income level. The opposite is true for payment for childcare after the full price level has been reached (at the combined 1.3 APW income level). However, the difference is still 10.0% when compared to the reference family at the highest income level, 6.3% in relation to the working family without children. The last figure shows the negative impact of the transition from a situation with work and no children to a situation with work and a child attending childcare.

Read 'vertically' the first column in Table DK1 indicates the isolated effects of maternity leave and the second column indicates the isolated effects of payment for childcare at the four income levels. The third column indicates transition effects when moving from a situation with work and no children (initial situation) to a situation with maternity leave and further on (fourth column) to a situation with work and childcare, both related to the initial situation. The terms 'isolated effects' and 'transition effects' are explained in more detail in the final section 'Comparisons'.

4.2 Sweden.

Graph S1. Family purse for a married couple working and without children and for the couple when the mother is on maternity leave receiving benefits.

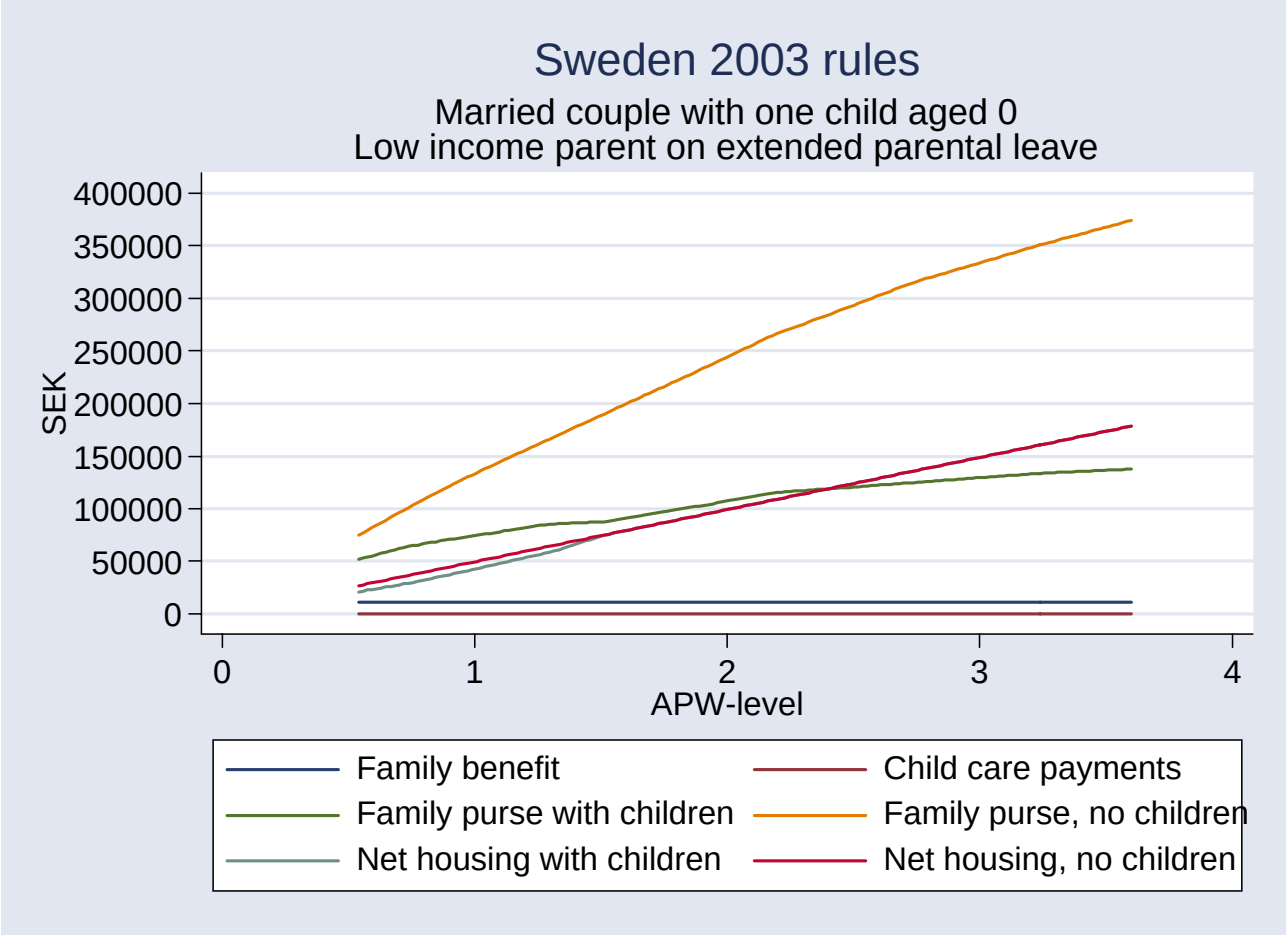


This graph is parallel to Graph DK1 for Denmark. The yellow curve is the F.P. of the working family without children and the green curve is the F.P. for the family where the mother is on maternity leave.

The green curve is above the yellow one up to an income level of approx. 0.8 APW, for incomes above this level the two curves change position. The maximum maternity benefit is reached at a former income level for the mother of approx. 1.2 APW – compared to Denmark, where this point lies at an income level of approx. 0.5 APW rather at a higher income level. At the 3.6 APW combined income level the difference between the two situations measured in F.P. terms is approx. 75,000 SEK, in Denmark it was approx. 140,000 DKK. The absolute negative economic impact from maternity leave is substantially smaller in Sweden than in Denmark for medium to high income levels.

Graph S2 illustrates the situation where the mother is on 'extended' maternity leave receiving a flat rate benefit.

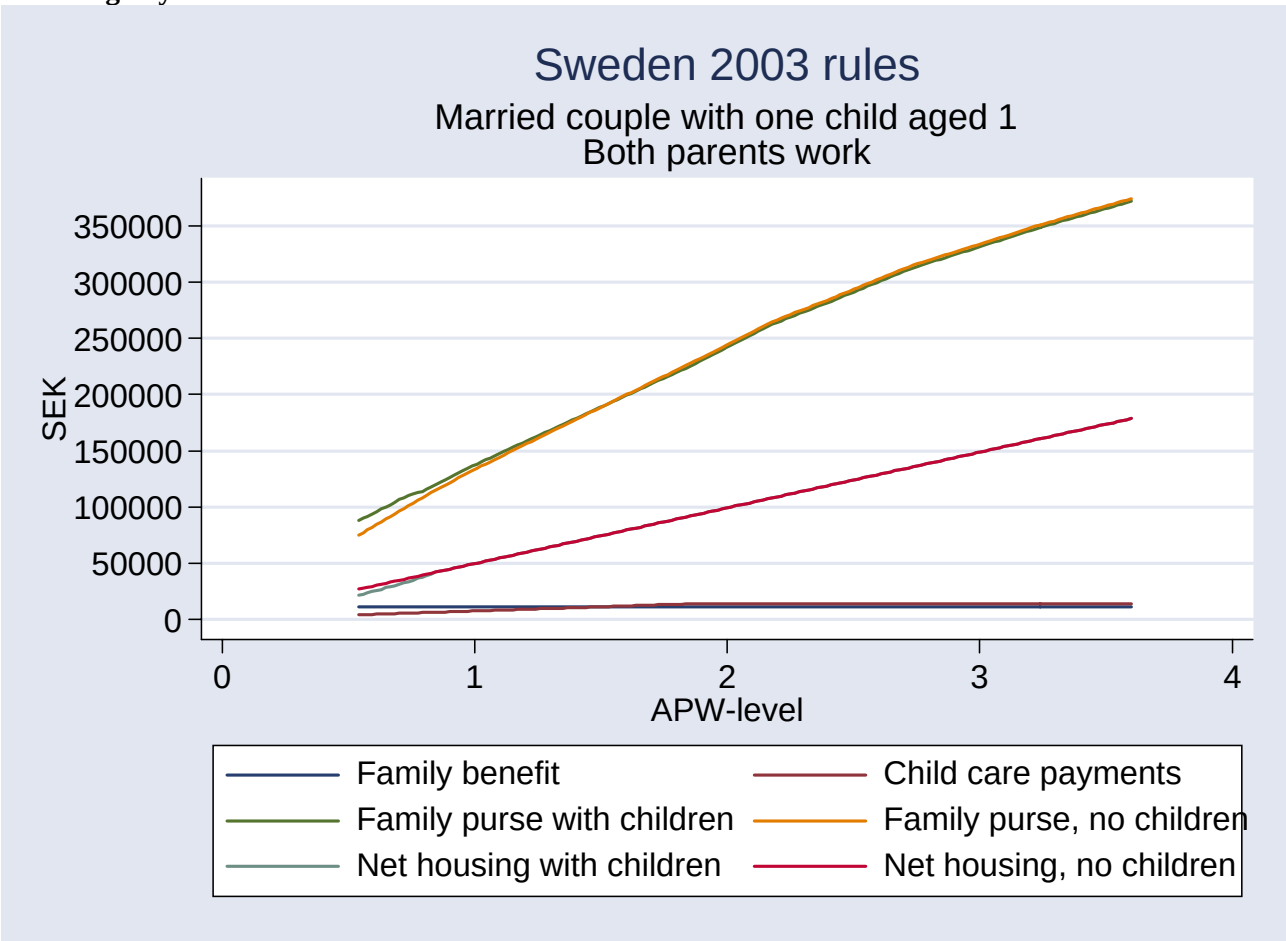
Graph S2. Family purse for a married couple working and without children and for the couple when the mother is on extended maternity leave receiving a low flat rate benefit.



The yellow curve is the familiar F.P. situation for the working couple without children and the green curve illustrates the F.P. situation of the family when the mother is using the 'extended'

maternity leave and is receiving flat rate benefits. The income gap between the two situations is substantial, at the top income level (3.6 APW) it is approx. 200,000 SEK.
Graph S3 illustrates the situation where both parents work and the child attends day care.

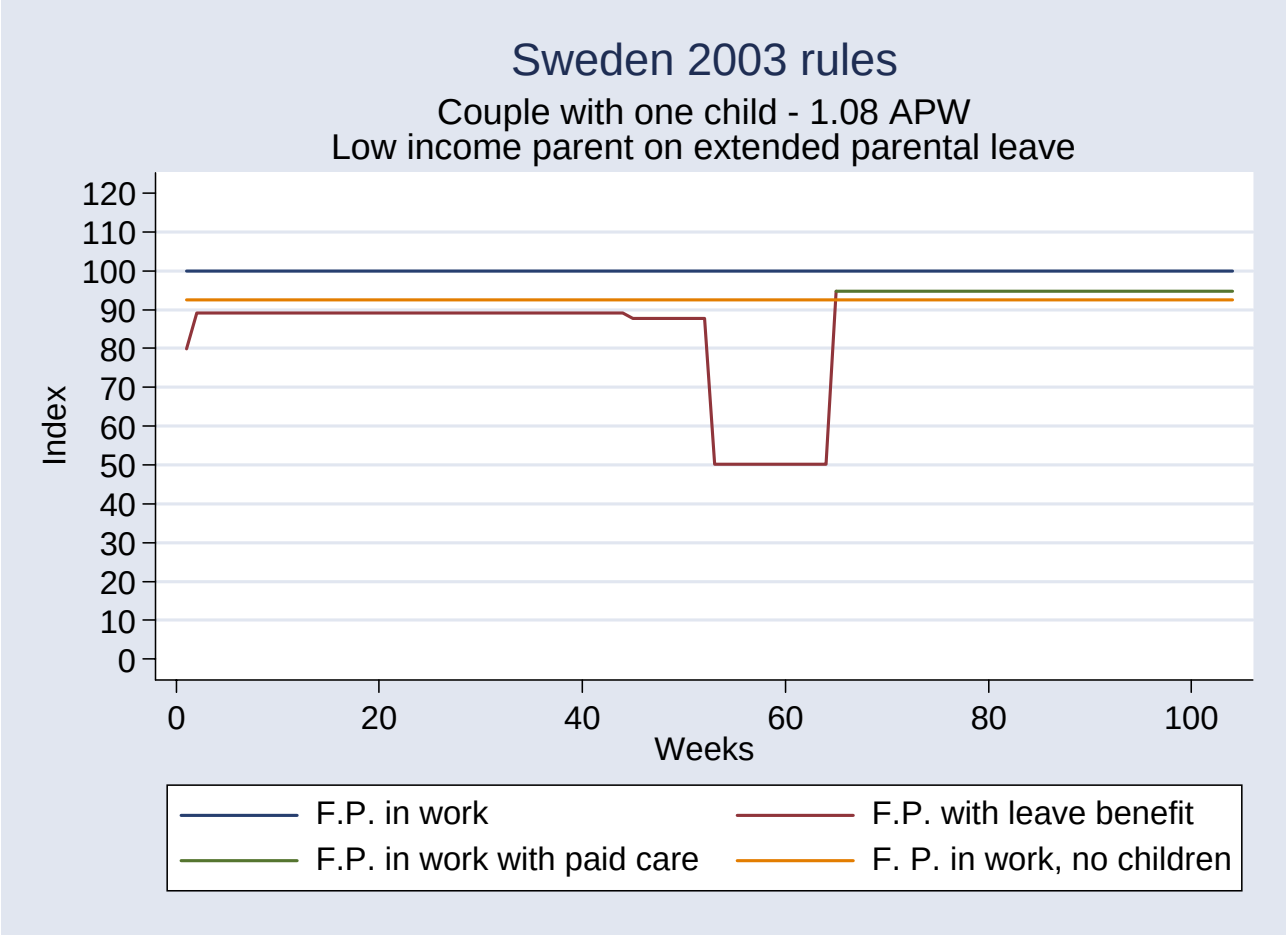
Graph S3. Family purse for a married couple working and without children as well as with a child attending day care.



The yellow curve is the F.P. situation for the working family without children and the green one is for the working family with a child attending day care. The green curve is a little above the yellow one up to a combined income level of approx. 1.4 APW, where the payment for childcare reaches the level of the child benefits. For higher income levels the two curves are very close to being identical, the reason being that the child benefits and the maximum payment (‘maxtaxa’) for childcare are very close, the ‘maxtaxa’ is 2,280 SEK higher than the child benefits. This difference is barely visible in the graph, but the yellow curve is above the green one from an income level of approx. 1.7 APW. The indication is that the impact from payment for childcare measured in relation to the F.P. of the working family without children is very small.

The ‘time dimension’ graphs for Sweden also contain the ‘extended’ leave where the mother receives a low flat rate benefit. The first ‘time dimension’ graph for Sweden is Graph S4 at the 1.08 APW income level.

Graph S4. Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for childcare. 1.08 APW income level.



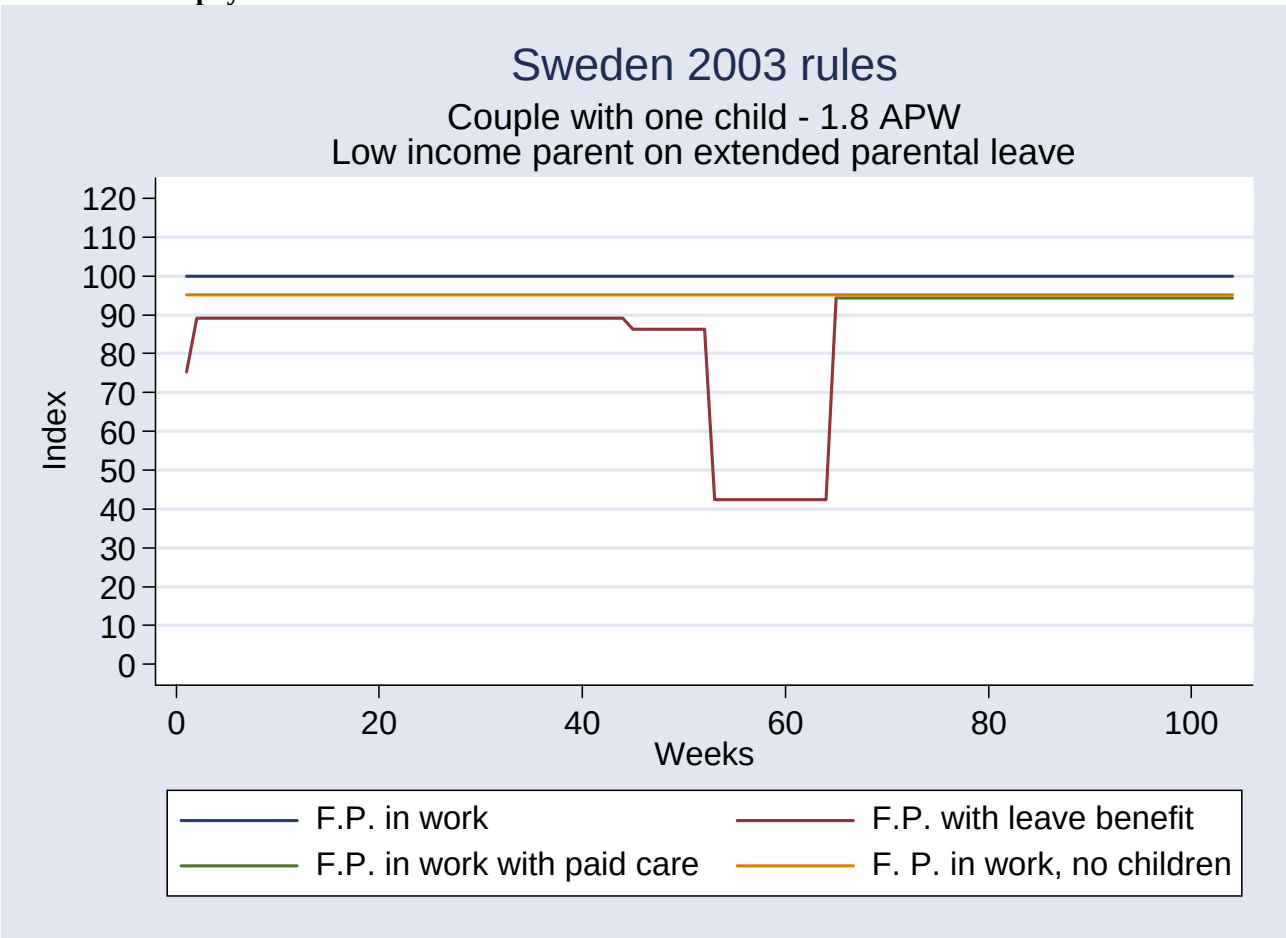
The overall reference line (dark blue = 100) is again our reference F.P. (for further explanations see the Danish description). Likewise, the yellow curve is the F.P. of the working family without children measured in relation to the F.P. of the reference family.

The first 1½ weeks of the red curve is the case where both parents are on leave just after delivery. Then 41½ weeks follow where the mother is on maternity leave while the father works. When the 41½ weeks end the father starts using his earmarked 60 days (8½ weeks). The benefits received by the parents up to now have been income related. The final part of the leave is 13 weeks for the mother receiving a flat rate benefit. After 64½ calendar weeks (66 leave weeks) both spouses work and the child attends day care. This situation is illustrated by the dark green line.

During the 41½ weeks leave for the mother the family F.P. lies 10.9% below the reference F.P., 3.7% below that of the working family without children. During the 'extended' leave for the mother, 13 weeks, these differences increase to 50% and 46% respectively. When both parents work and the child attends day care the F.P. of the family is 5.2% below that of the reference F.P. but 2.4% above the F.P. of the working family without children.

The next graph illustrates the transition for the 1.80 APW income level.

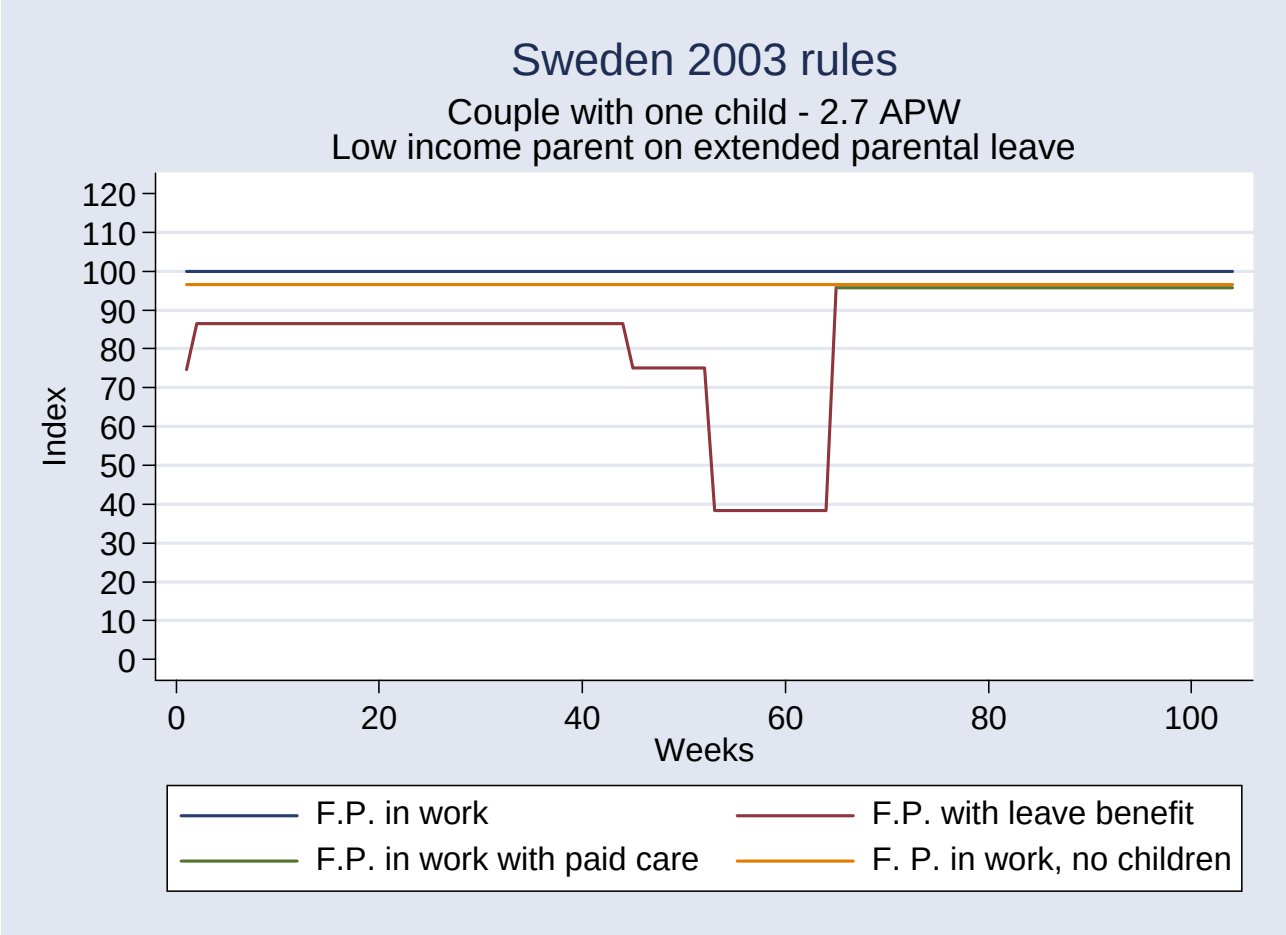
Graph S5. Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for childcare. 1.80 APW income level.



The F.P. of the family is still 11% below the reference F.P. during the 41½ weeks leave for the mother, the benefit has not reached its maximum yet. Measured in relation to the yellow line the loss is now 6.4%, the yellow line has moved closer to the dark blue reference line at this income level. For the 'extended' leave for the mother the loss is 59% in relation to the reference F.P., 56% in relation to the F.P. of the working family without children. The F.P. for the working family where the child attends day care is 5.7% below the reference level and 0.9% below the F.P. for the working family without children.

Graph S6 illustrates the situation at the 2.7 APW level.

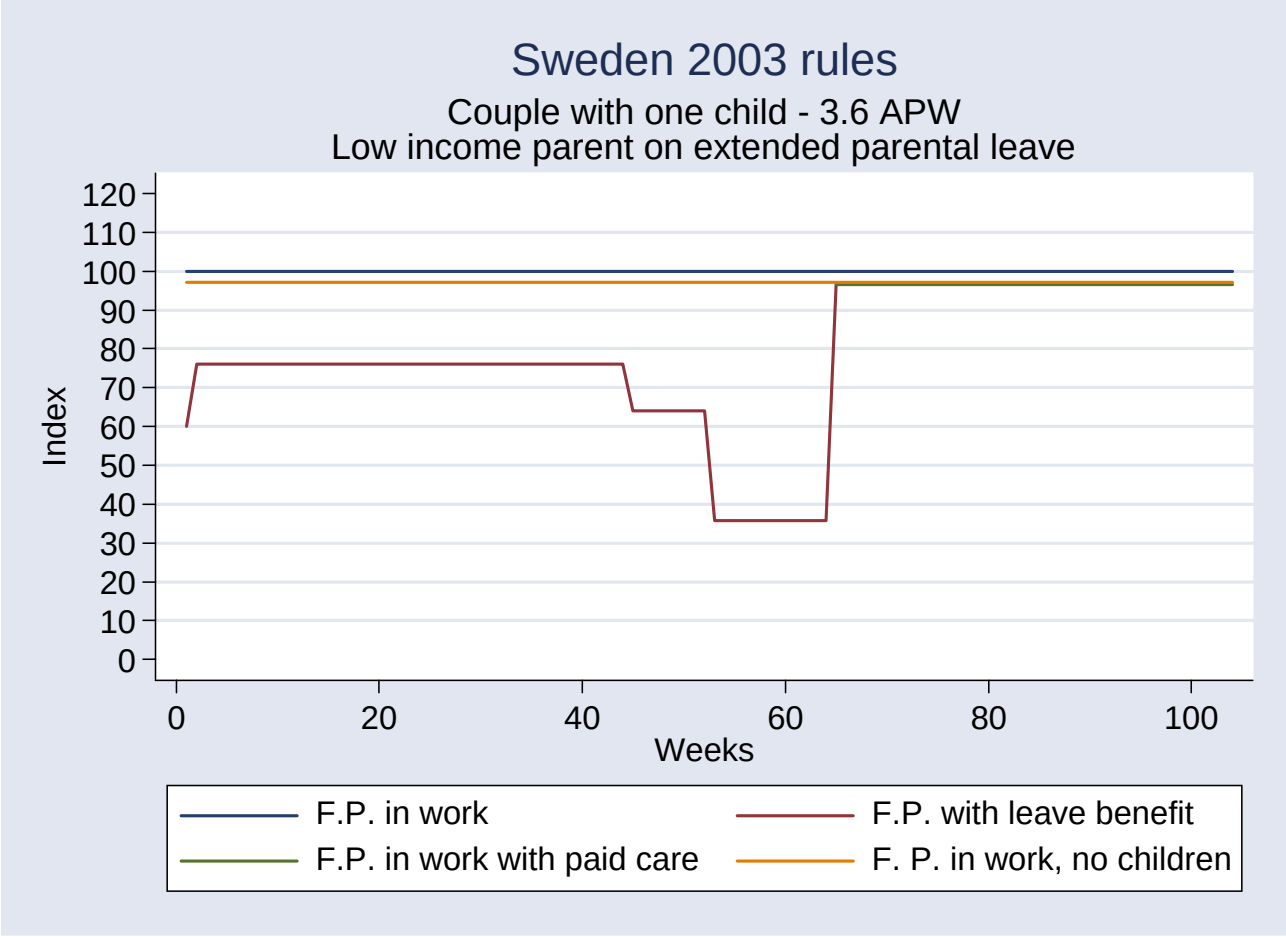
Graph S6. Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for childcare. 2.7 APW income level.



At this income level, 2.7 APW, the loss during the 41½ weeks of leave for the mother has increased to 13.5% when compared with the reference F.P. and 10.3% when compared with the F.P. of the working family without children. For the 'extended' leave the corresponding figures are 61% and 59% respectively. The F.P. of the working family with a child attending day care is now only 4.2% below the reference F.P. and a 'little' (0.7%) below the F.P. for the working family with no children.

The last income we look at is a high income level, a combined gross income of 3.6 APW.

Graph S7. Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for childcare. 3.6 APW income level.



The relative impact is now a loss of 24.0% in F.P. compared to the reference F.P. when the mother is on leave for 41½ weeks, 21.6% in relation to the working family without children. The losses from the extended leave are 63% and 62% respectively. The F.P. of the working family with a child attending day care is 3.5% lower than that of the reference family and again a 'little' (0.6%) below the F.P. for the working family without children.
Table S1 summarizes the results for the Swedish case.

Table S1. Impact on family purse (F.P) from maternity leave and payment for childcare. Percent.

APW level	Reference family (isolated effects)			Working family, no children (transition effects)		
	Maternity I	Maternity II	Childcare	Maternity I	Maternity II	Childcare
1.08	-10.9	-50	-5.2	-3.7	-46	+2.4
1.8	-11.0	-59	-5.7	-6.4	-56	-0.9
2.7	-13.5	-61	-4.2	-10.3	-59	-0.7
3.6	-24.0	-63	-3.5	-21.6	-62	-0.6

Note: Maternity I: Income related benefit. Maternity II: Flat rate benefit.

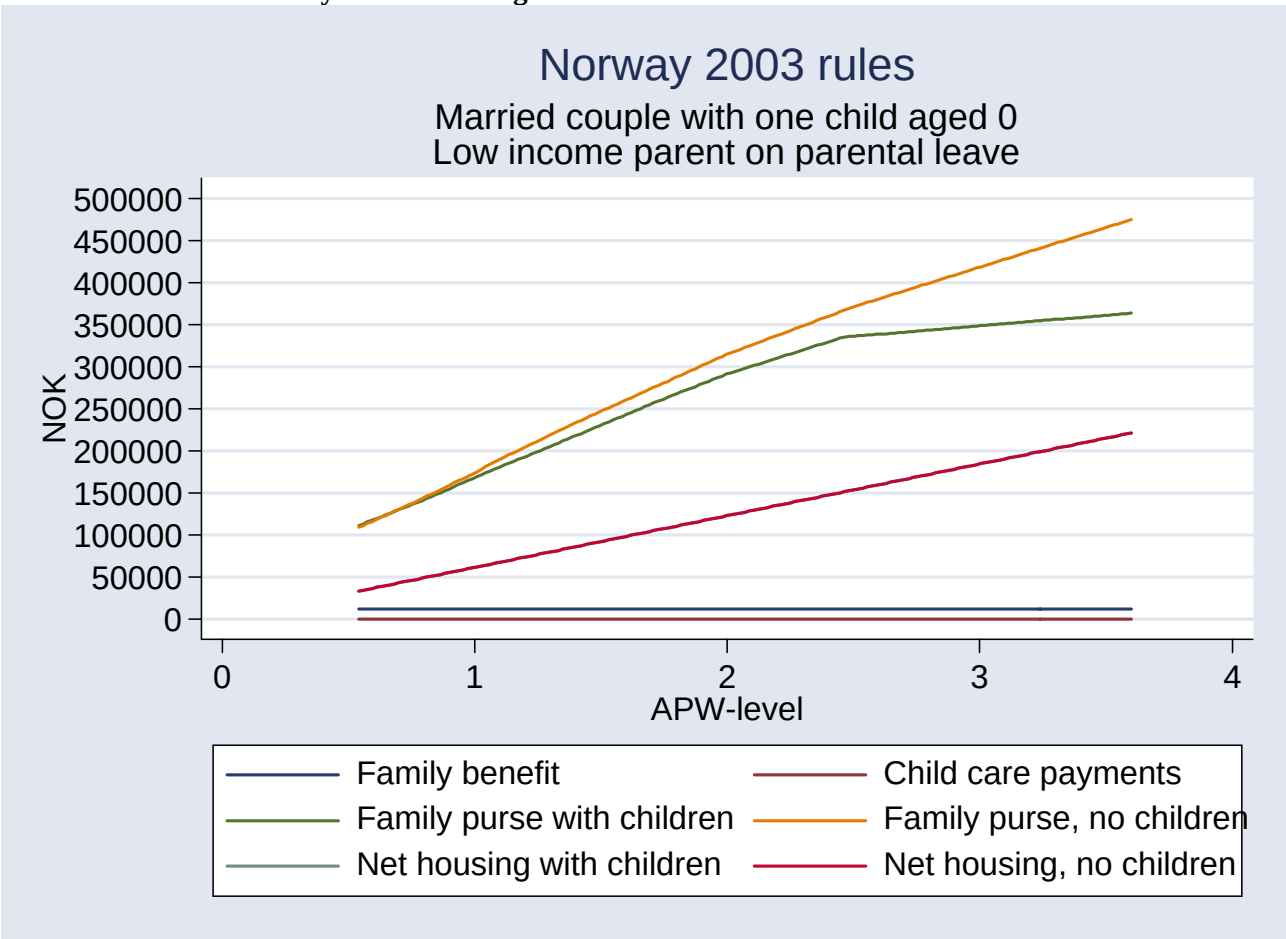
The loss during the 41½ weeks of maternity leave is below or equal to 10.3% compared to the F.P. of the working family without children up to and including the 2.7 APW income level... At the 3.6 APW income level the loss is 21.6%, it is about ½ of what it was in the corresponding Danish case. Attending the 'extended' maternity leave implies heavy losses for the family.

Payment for childcare is modest in Sweden, the loss spans from 5.2 over 5.7 and 4.2 to 3.5% from the lowest to the highest income level measured in relation to the reference F.P.. Measured in relation to the working family without children the impact is in the range from +2.4% to – 0.6% of the F.P. for this family. The losses implied in the transition from work without children to work with a child attending day care are very small, 1% or less. At the lowest income level there is even a minor gain.

The first column in Table S1 contains the isolated effects from maternity leave and the third column contains the isolated effects from payment for childcare at the four income levels. The fourth column contains the effects of the transition from the initial situation, work without children, to a situation with maternity leave and further on (sixth column) to a situation with work and childcare, both related to the initial situation.

4.3 Norway.

Graph N1. Family purse for a married couple working and without children and for the couple when the mother is on maternity leave receiving benefits.

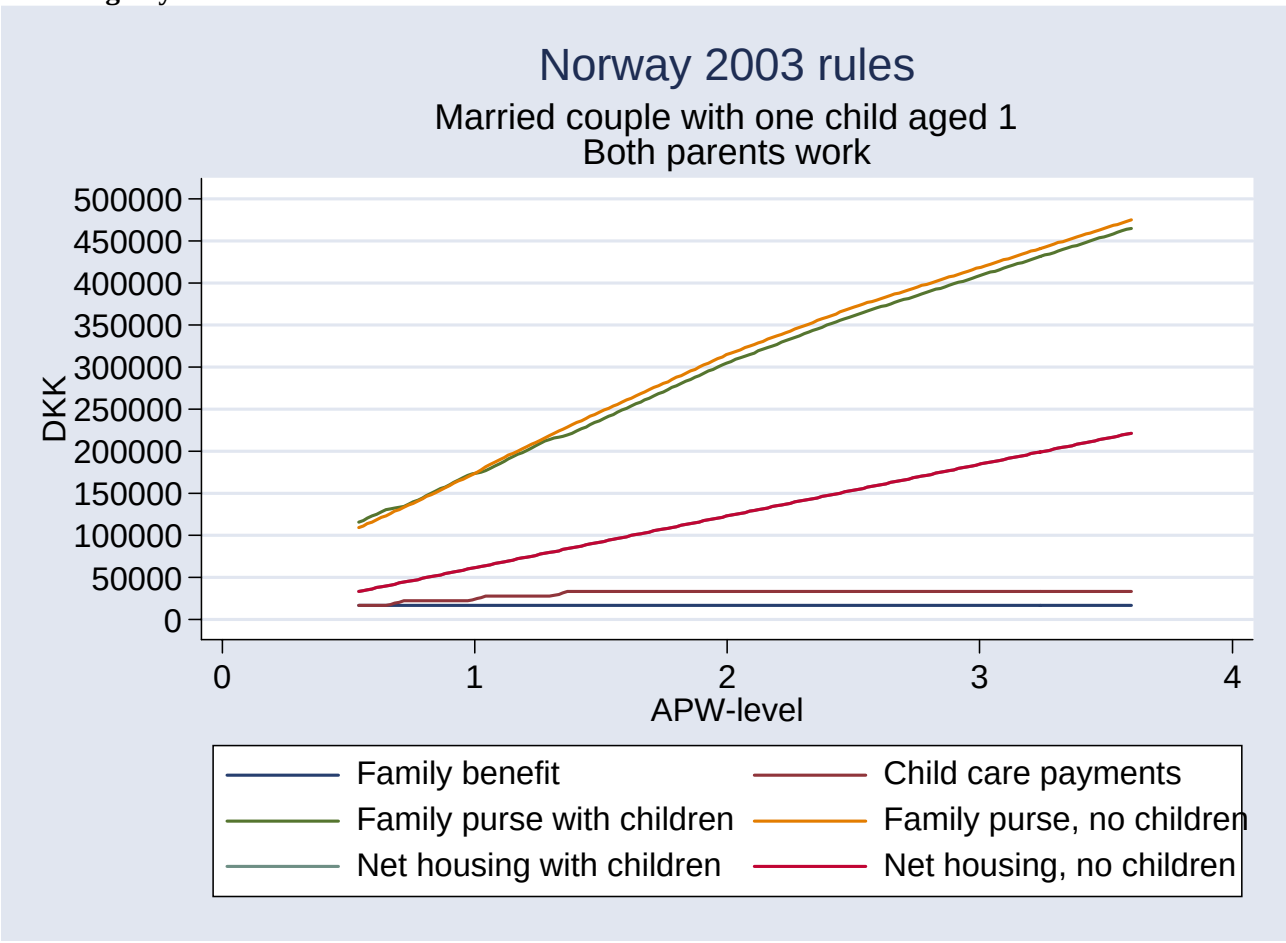


This first graph illustrates the F.P. for the working family without children (yellow curve) and the F.P. for the family with a child and the mother on maternity leave (green curve).

The green curve is below the yellow one, at least from a combined income level of approx. 1 APW. The maternity benefit is 80% of the former gross wage until its maximum is reached at an income level of approx. 1.1 APW, this is a little lower than in Sweden (approx. 1.2 APW) but substantially higher than in Denmark (a little above 0.5 APW). At the combined income level of 3.6 APW the F.P. of the family with the mother on maternity leave is approx. 130,000 NOK lower than the F.P of the working family without children. This is in absolute terms somewhat lower than in Denmark (140,000 DKK) but substantially higher than in Sweden (75,000 SEK).

Graph N2 illustrates the case when both spouses work and the child attends childcare.

Graph N2. Family purse for a married couple working and without children as well as with a child attending day care.

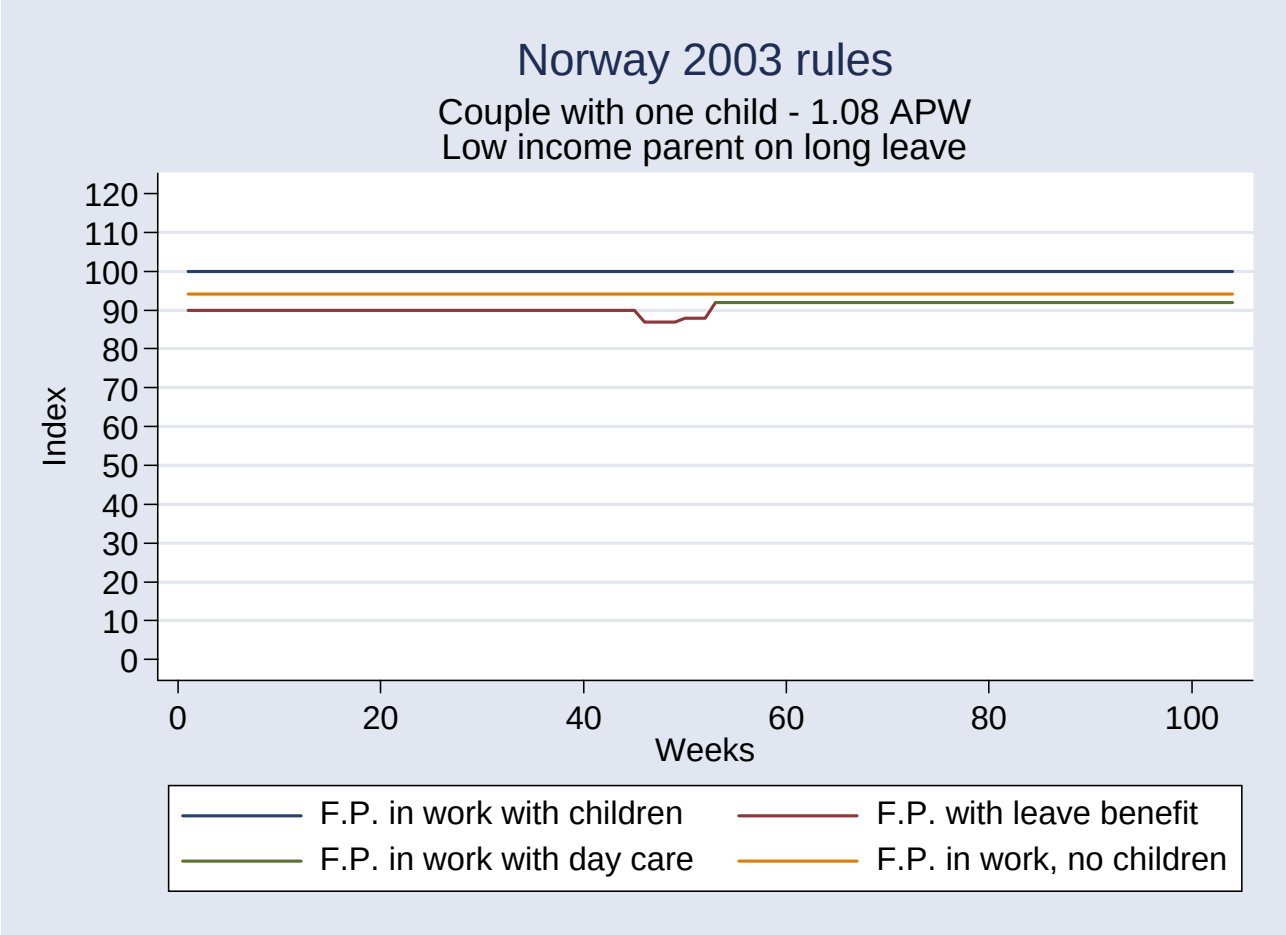


The yellow curve is for the working family without children and the green one is for the working family with a child attending day care. The green curve is for most of the income span below the yellow one. From a combined income level of approx. 1.4 APW, when the day care payment has reached its maximum, the difference between the two curves becomes constant. This difference is the max. day care payment, 33,000 NOK, minus the child benefits, 11,664 NOK, minus the tax

value of the tax allowance for childcare costs, 7,000 NOK (25,000 x 0.28), in total 14,336 NOK. This is more than in Sweden (2,280 SEK), but less than in Denmark (approx. 20,000 DKK).

The first 'time dimension' graph for Norway is Graph N3 at the 1.08 APW income level.

Graph N3. Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for childcare. 1.08 APW income level.



The overall reference line (dark blue = 100) is the reference F.P. (see the Danish section for further explanations). The yellow line is again the F.P. of the working family without children measured in relation to the F.P of the reference family.

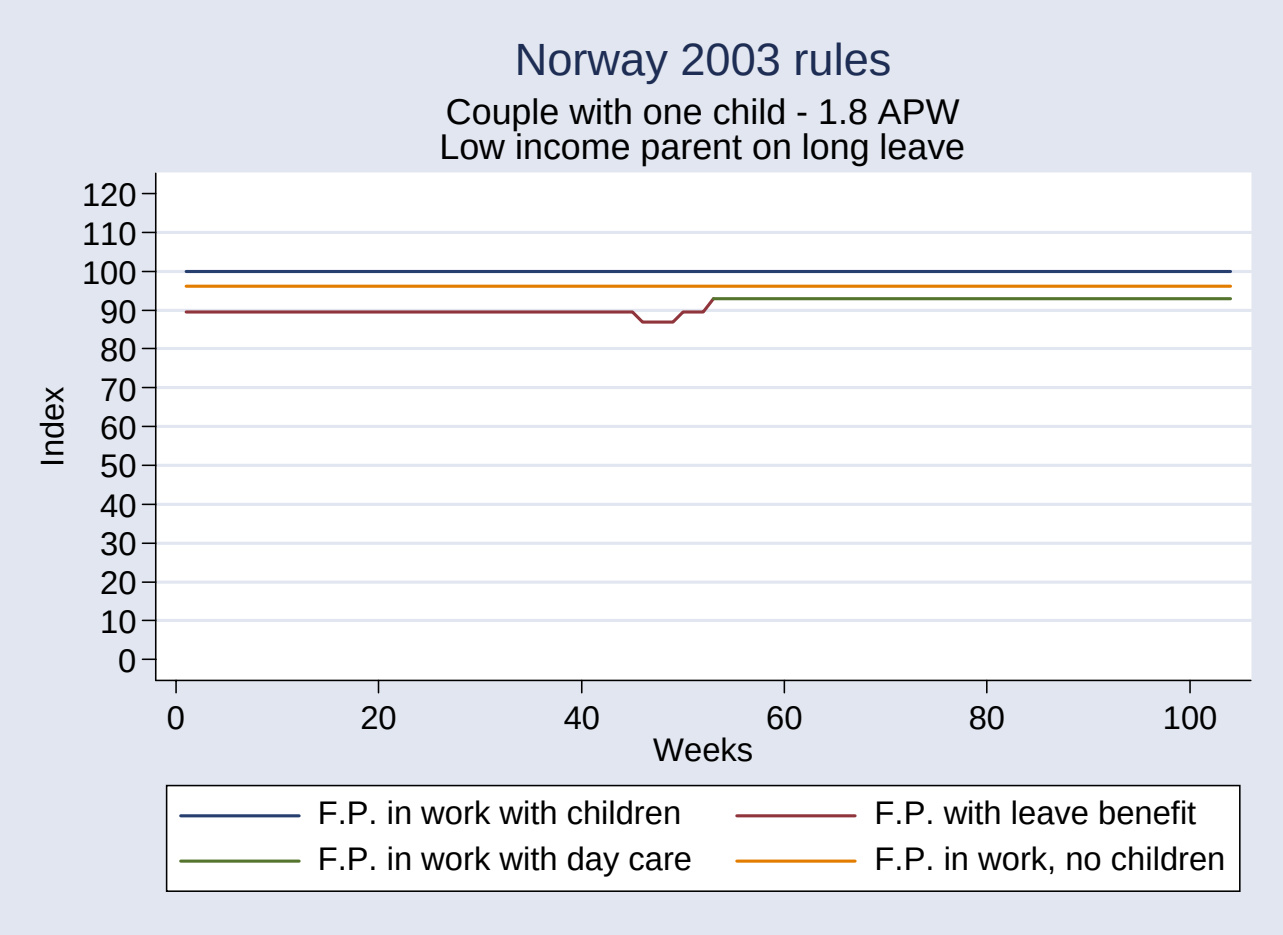
The first 45 weeks of the red curve is the case where the mother is on maternity leave while the father works. Then there follow 4 weeks when the father is on paternity leave while the mother is working. These 4 weeks can be placed anywhere after the first 6 weeks (after delivery) for the mother. in our model, the three remaining weeks before the child becomes one year are taken by the mother as holidays receiving holiday payment (here assumed to be identical to the maternity leave benefit). When the child becomes one year of age he or she attends day care, the dark green line illustrates this situation.

During the first 45 weeks of leave for the mother the family F.P. is 10.1% below the reference F.P., 4.4% below that of the working family without children. When both parents work and the child

attends day care the F.P. of the family is 8.0% below the reference F.P. and 2.3% below the F.P. of the working family without children.

Graph N4 illustrates the same situations but at the combined income level of 1.80 APW.

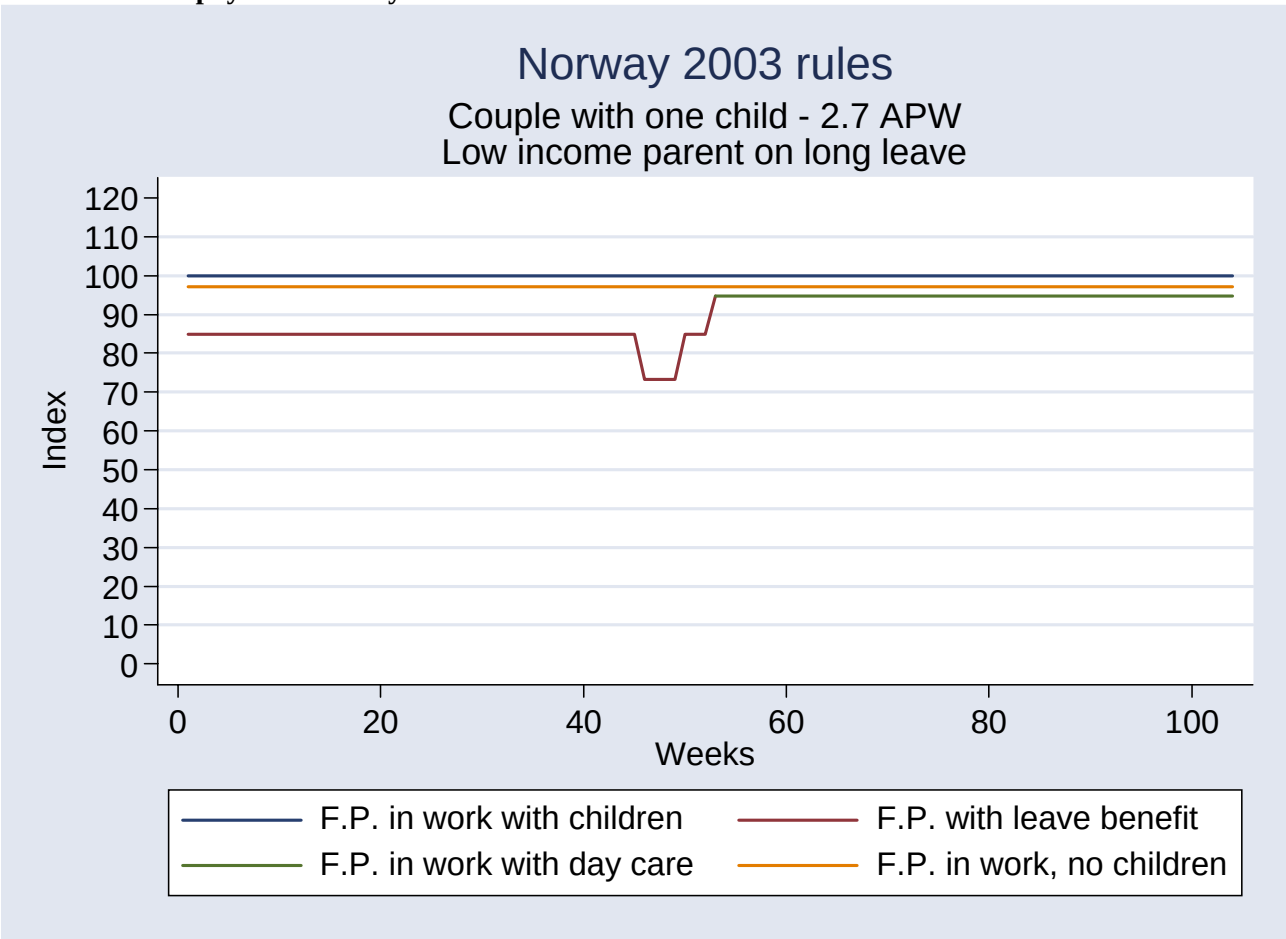
Graph N4. Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for childcare. 1.80 APW income level.



The F.P. is 10.5% below the reference F.P. during the 45 weeks of maternity leave for the mother, the maternity leave benefit is still 80% of the former wage income at this income level. Measured in relation to the F.P. of the working family without children it is 6.9% below, but the yellow line has also moved closer to the reference line. The difference between these two lines is the child benefits, and they decline in relative importance with growing income. The F.P. for the working family when the child attends day care is 7.1% below the reference F.P. and 3.4% below the F.P. of the family without children. The payment for childcare increases compared to the 1.08 APW income level, it reaches its maximum at the 1.80 APW income level. Despite this, the loss is lower than at the 1.08 APW income level when measured in relation to the reference F.P. but higher when measured in relation to the yellow line, which, as already mentioned, has moved closer to the reference line.

Graph N5 shows the transition for the 2.7 APW income level.

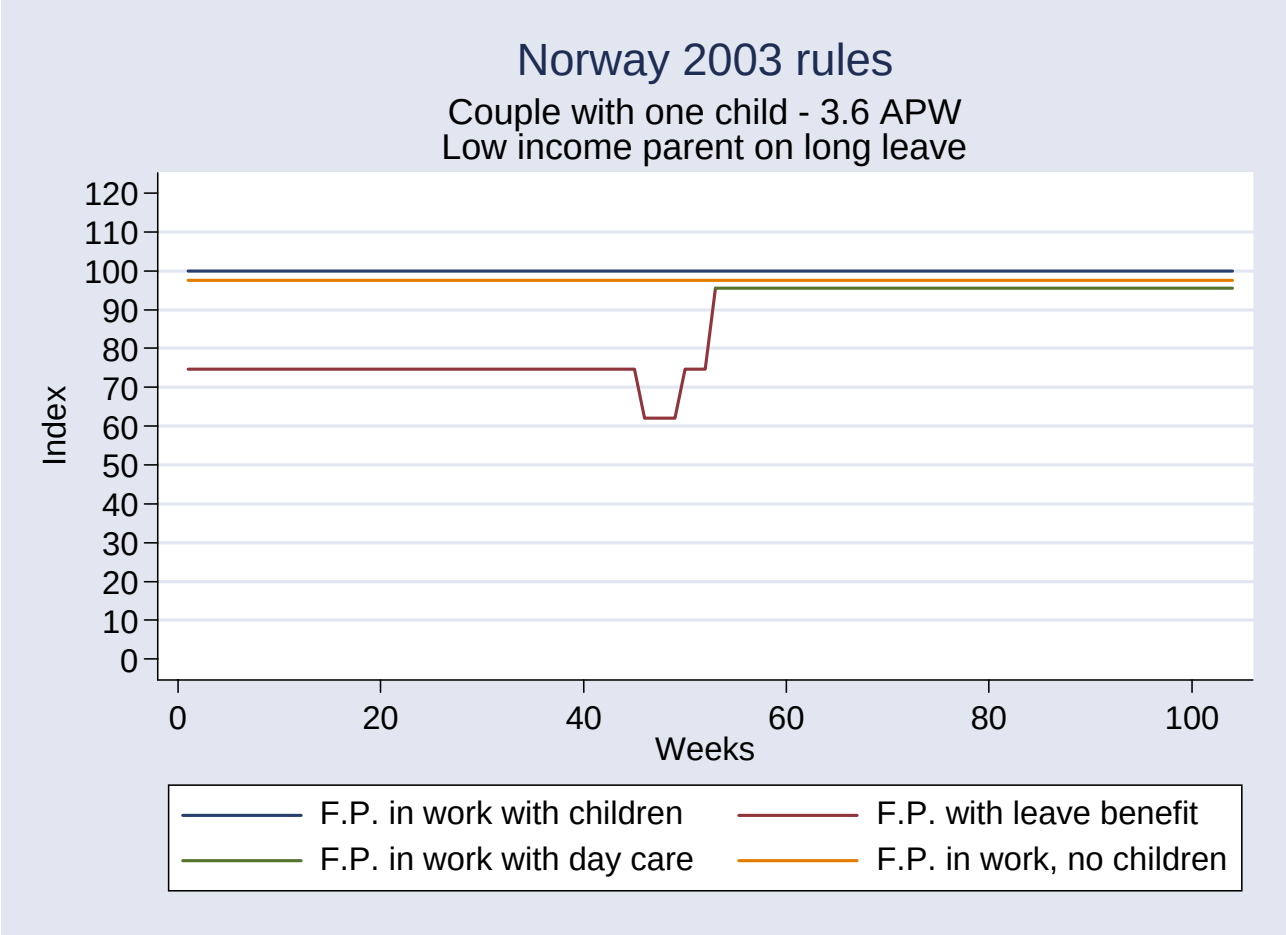
Graph N5. Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for day care. 2.7 APW income level.



The maternity leave benefit has now reached its maximum and the loss increases to 15.1% of the reference F.P., 12.5% of the F.P. of the working family without children. The payment for childcare has already reached its maximum at the 1.8 APW income level, why the relative impact from this component is smaller at the higher 2.7 APW income level. Measured against the reference F.P. the loss in F.P. is 5.3%, measured against the F.P. of the working family without children the loss is 2.5%.

The last combined income level we consider is that of 3.6 APW.

Graph N6. Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for day care. 3.6 APW income level.



At this income level the F.P. loss increases to 25.2% when measured against the reference F.P., 23.4% when measured against the F.P. of the working family without children during the maternity leave for the mother. For the working family with a child in day care the losses are 4.4% and 2.1% respectively. It should be noted that the absolute loss in F.P. during the maternity leave for the mother is 130,000 NOK compared to the working family, for the corresponding Danish situation the loss is 140,000 DKK. This quite small difference in absolute terms becomes a difference between 23.4% and 41.5% in relative terms. The reason is that the Norwegian F.P.s at this income level are much higher than the Danish ones.

Table N1 summarizes the results.

Table N1. Impact on family purse (F.P.) from maternity leave and payment for childcare. Percent.

APW level	Reference family (isolated effects)		Working family, no children (transition effects)	
	Maternity	Childcare	Maternity	Childcare
1.08	-10.1	-8.0	-4.4	-2.3
1.8	-10.5	-7.1	-6.9	-3.4
2.7	-15.1	-5.3	-12.5	-2.5
3.6	-25.2	-4.4	-23.4	-2.1

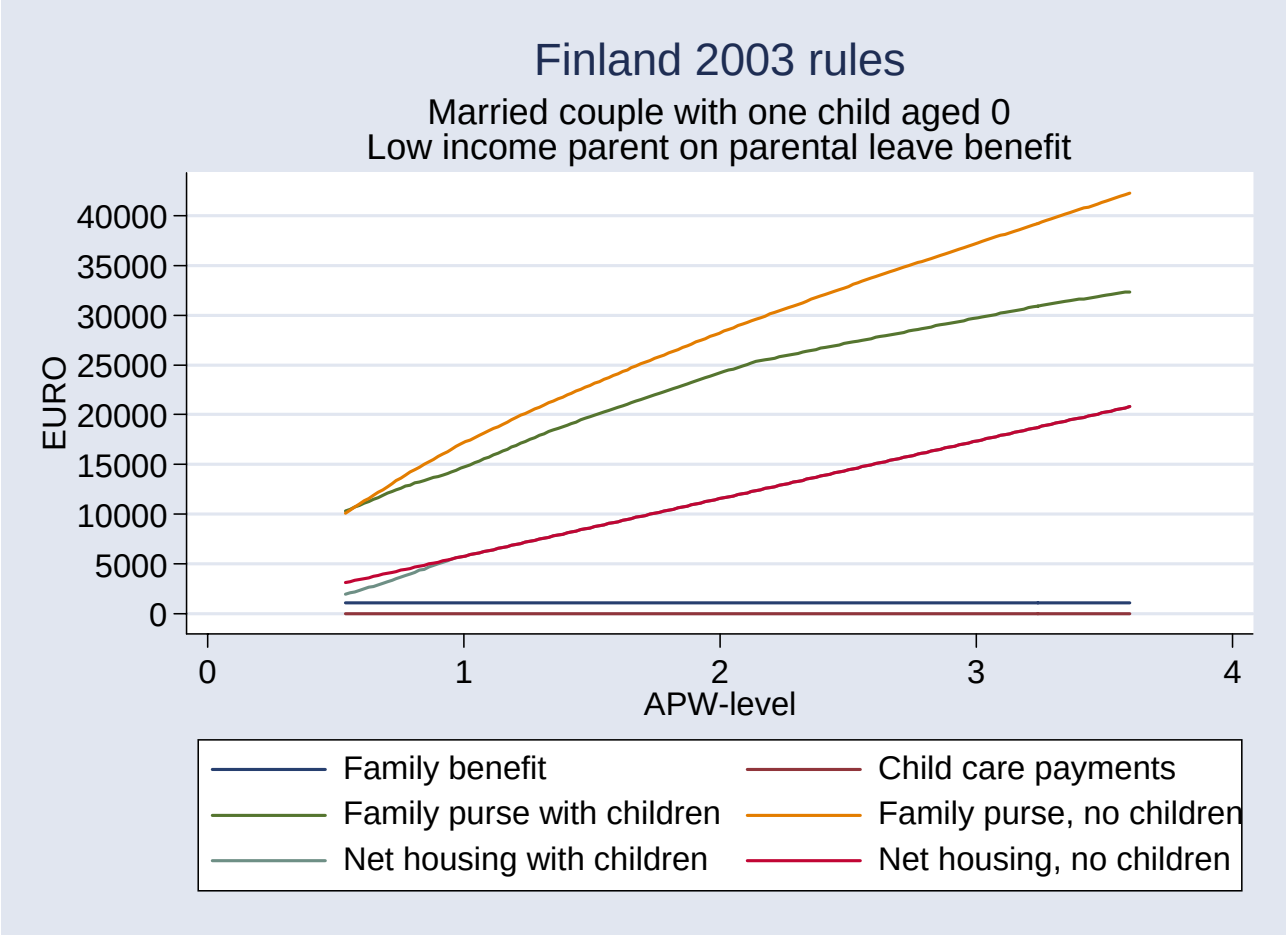
The loss during the maternity leave for the mother is 4.4 and 6.9% respectively for the two lowest income levels compared to the F.P. of the working family without children. The loss increases to 12.5% and 23.4% respectively at the following higher income levels. These losses are a little higher than in Sweden but substantially lower than in Denmark.

Payment for childcare is relatively modest in Norway, the loss spans from 8% to 4.4% when moving from the lowest to the highest income level measured in relation to the reference F.P.. Measured in relation to the working family without children the impact is in the range from –3.4% to –2.1% of the F.P. of this family. This is more than in Sweden but much lower than in Denmark.

The first column in Table N1 contains the isolated effects from maternity leave and the second column contains the isolated effects from payment for childcare at four income levels. The third column contains the effects of the transitions from the initial situation (work and no children), to a situation when the mother is on maternity leave and further on (fourth column) to a situation when both parents are working and the child is attending day care.

4.4 Finland.

Graph FIN1. Family purse for a married couple working and without children and for the couple when the mother is on maternity leave receiving benefits.

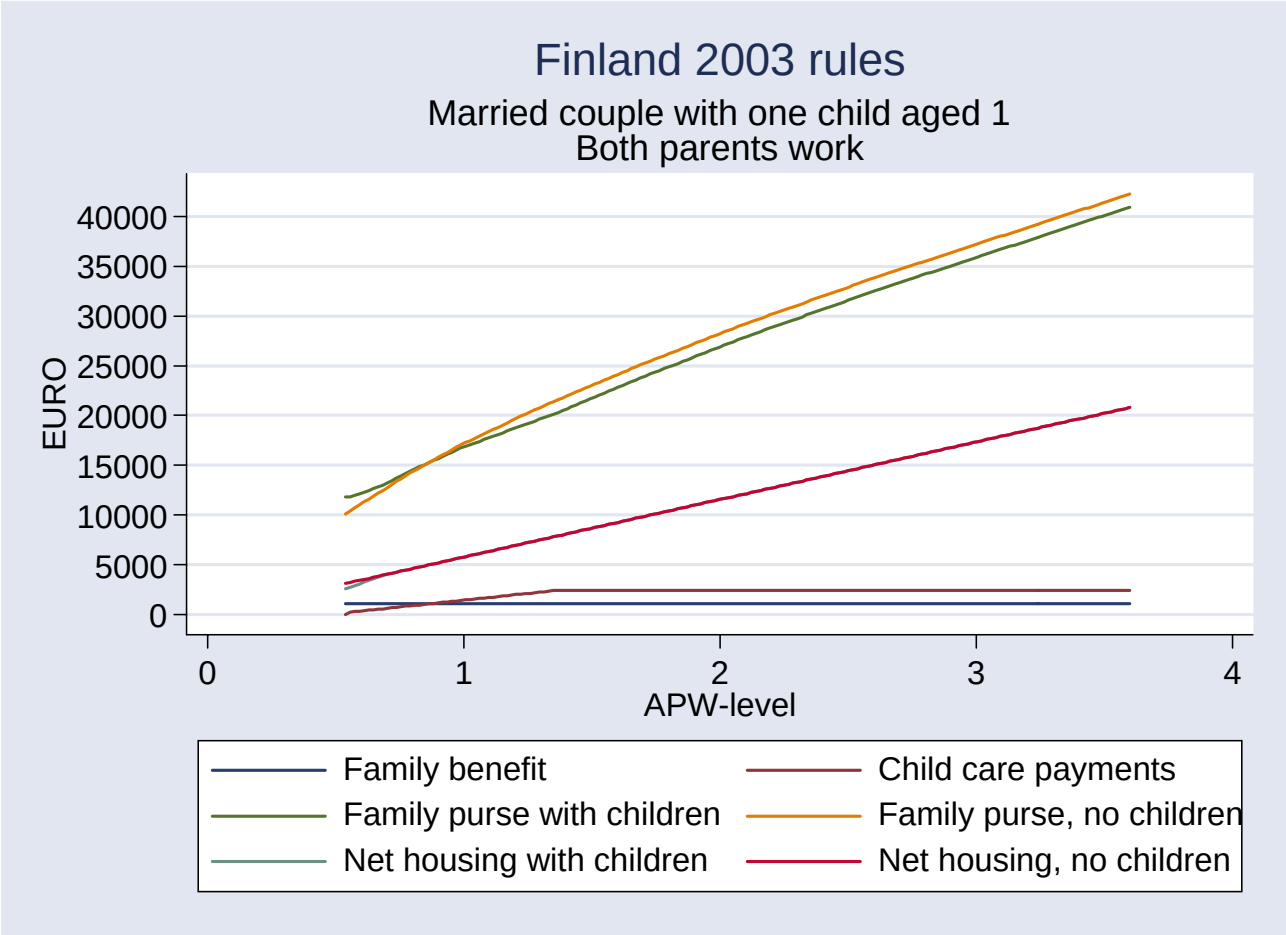


This fist Finnish graph illustrates the F.P. for the working family without children (yellow curve) and the F.P. for the family when it gets a child and the mother is on maternity leave receiving benefits (green curve).

The green curve is below the yellow one except for very low income levels. The Finnish maternity leave benefits are not capped but the compensation declines at an income level of approx. 0.9 APW for the mother. This becomes visible as a kink on the green curve at a combined income level for the couple of approx. 2 APW. There is another, but less distinct kink at a former income level of approx. 1.4 APW for the mother. At the 3.6 APW level the F.P. of the family is approx. 10,000 EUR lower than the F.P. of the working family without children. This loss is somewhat larger than the corresponding one in Sweden but substantially lower than the Danish and Norwegian ones.

Graph FIN2 illustrates the impact of payment for childcare for the Finnish couple using this service.

Graph FIN2. Family purse for a married couple working and without children as well as with a child attending day care.

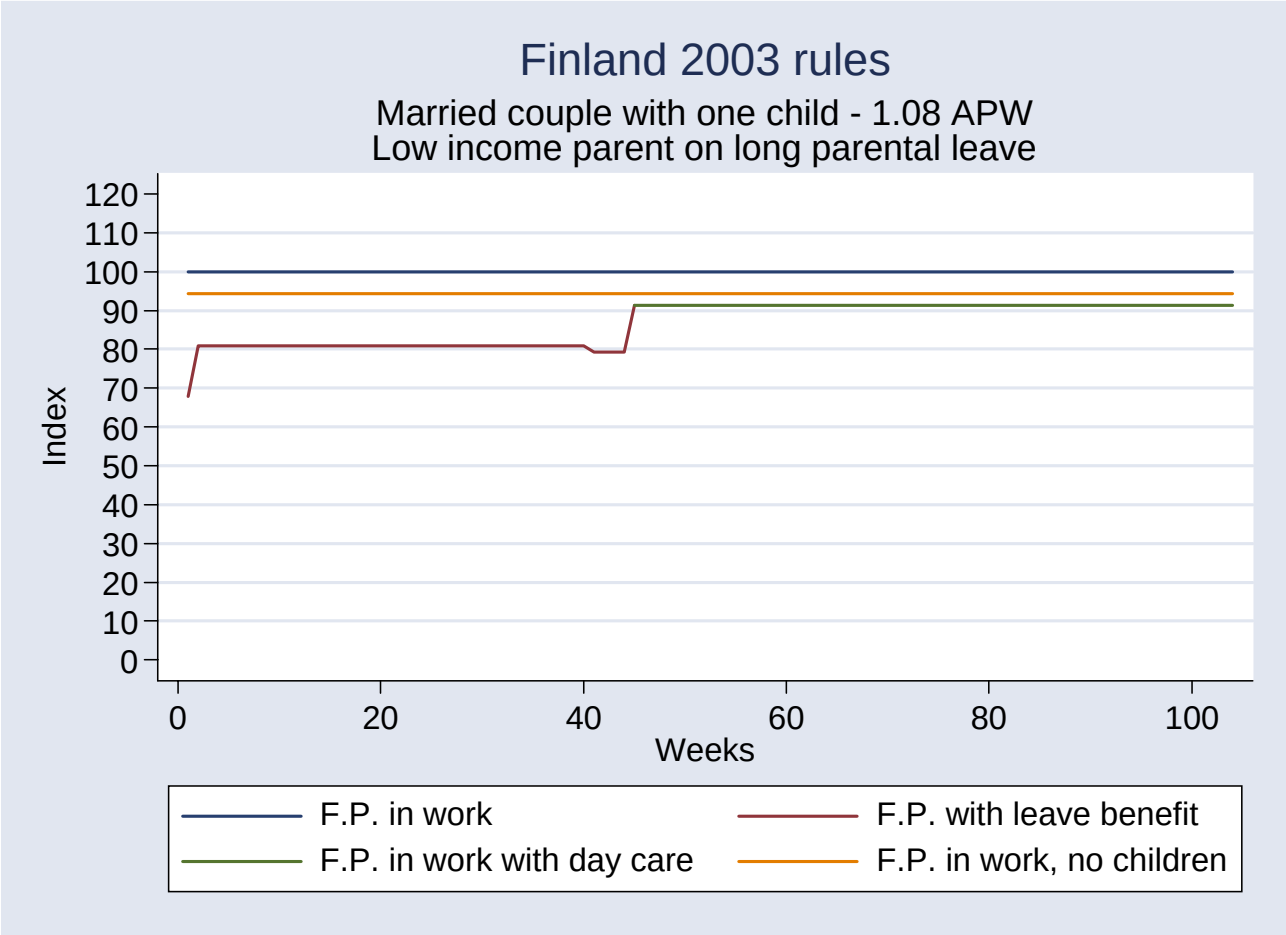


The F.P. of the working family without children is illustrated by the yellow curve, while the green curve illustrates the F.P. situation for the working family with a child attending day care. The payment for childcare is illustrated by the dark red curve. It has the same stepwise shape also seen for the other Nordic countries. Payment for childcare is gradually increased with increasing income until the payment reaches a maximum.

The green curve is above the yellow one for low incomes where the payment for childcare is low (lower than the child benefits). The housing benefits for families with children also make their impact. The payment for childcare reaches its maximum level at a combined former income of approx. 1.3 APW. For income above this level the green curve is below the yellow one. The difference between the two curves is equal to the difference between the full payment for childcare and the child benefits, i.e. 1,320 EUR. This difference is larger than in Sweden but substantially smaller than in Norway and Denmark.

The first ‘time dimension’ graph - Graph FIN3 – shows the transition of the family at the 1.08 APW income level.

Graph FIN3. Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for childcare. 1.08 APW income level.



The reference line F.P. (dark blue = 100) is the F.P. of the working family with a child not attending childcare (for further explanation see the Danish section).

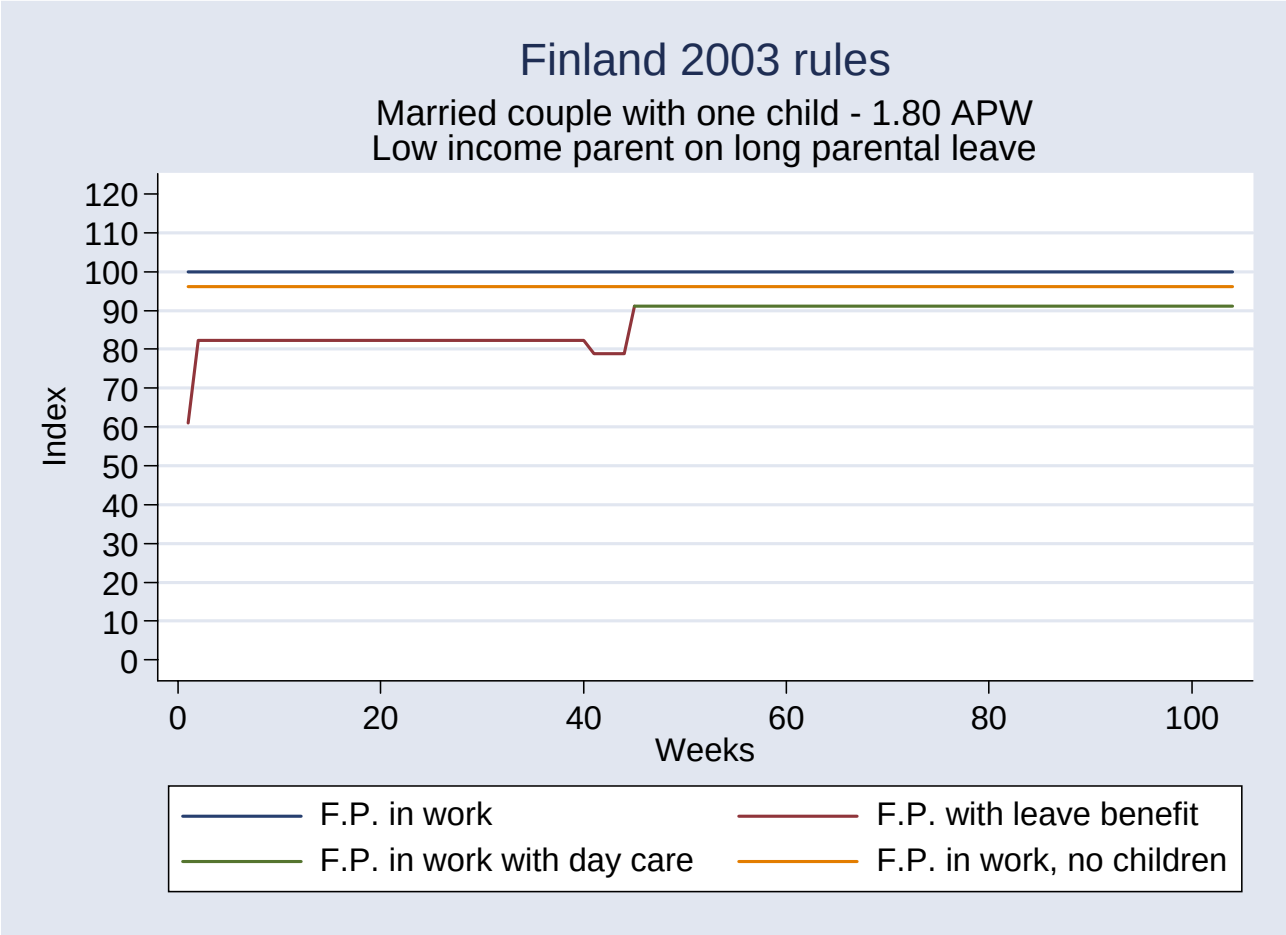
The first week of the red curve is the situation when both parents are on leave together just after delivery. Then 39 weeks follow where the mother is on maternity leave while the father works. Finally the father is on paternity leave for 4 weeks while the mother works. When the leave is over after 44 calendar weeks, both parents work and the child attends day care. This situation is illustrated by the dark green line.

During the 39 weeks of leave for the mother the F.P. of the family is 19.1% below the reference F.P. and 14.3% below the F.P. of the working family without children.

When both parents work and the child is in day care the F.P. loss of the family is 8.6% compared with the reference F.P. and 3.2% compared with the F.P. of the working family without children. The family does not pay the maximum rate for childcare at this income level.

Graph FIN4 illustrates the situation at the 1.80 APW income level.

Graph FIN4. Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for childcare. 1.80 APW income level.

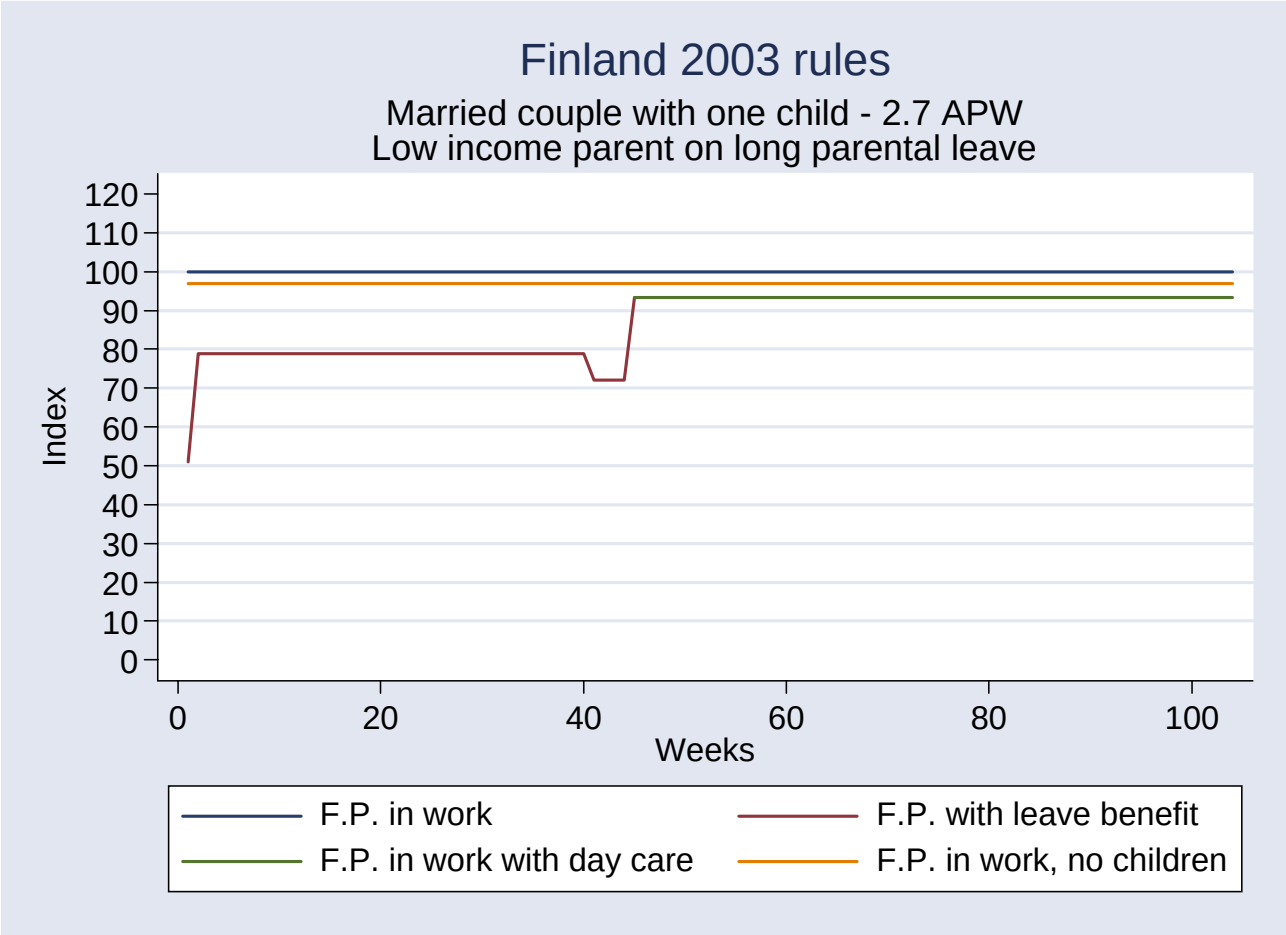


The situation at the 1.80 APW income level is not very different from the one in Graph FIN3. The loss from the 39 weeks of maternity leave for the mother is now 17.7%, slightly lower than before (this may be an effect from taxation) measured in relation to the reference F.P.. In relation to the F.P. of the working family without children the loss is now 14.3%, the same as before, the yellow line has moved closer to the reference line.

For the working family with a child attending day care the F.P. loss is 8.8% in relation to the reference F.P., 5.0% in relation to the F.P. of the working family without children. The payment for childcare is now according to the maximum rate.

Graph FIN5 is the 'time dimension' graph at the 2.70 APW income level.

Graph FIN5. Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for childcare. 2.70 APW income level.

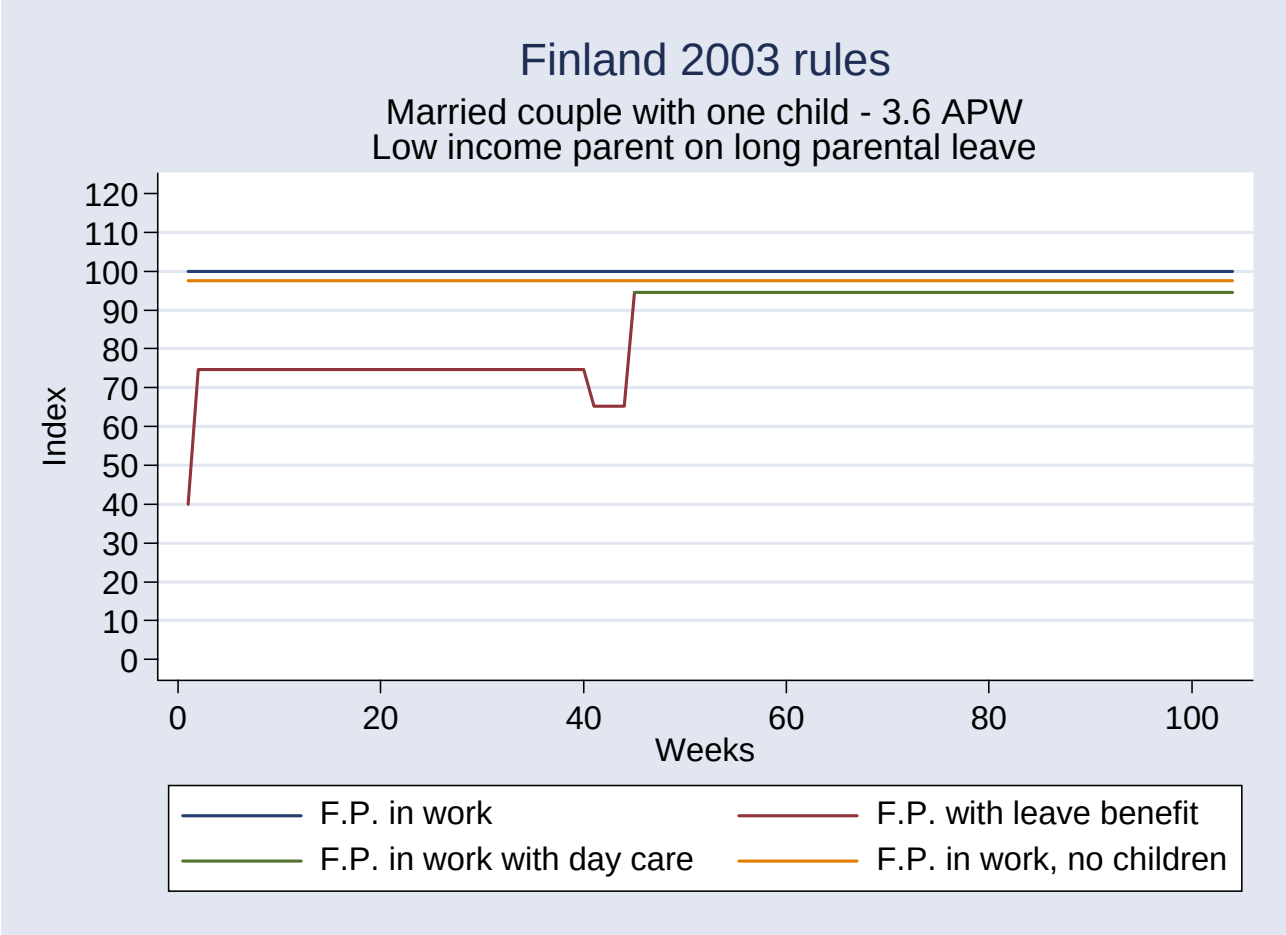


At this income level, 2.7 APW, the F.P. loss during the mother's maternity leave increases to 21.1% in relation to the reference F.P. and 18.6% in relation to the F.P. of the working family without children.

The payment for childcare has an impact of a 6.7% lower F.P. relative to the reference F.P. and a 3.8% lower F.P. relative to that of the working family without children.

Graph FIN6 considers the last income level, namely 3.6 APW.

Graph FIN6. Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for childcare. 3.6 APW income level.



At the 3.6 APW income level, the mother's maternity leave implies a 25.3% lower F.P. than the reference F.P. and a 23.4% lower F.P. than that of the working family without children. These are very close to the losses in the corresponding Swedish case. It should, however, be remembered that the Finnish benefits are uncapped; they do not have a maximum. Therefore, the Finnish couple at even higher income levels is better off than the Swedish couple at corresponding income levels (the Swedish maternity benefit has a ceiling for former incomes above 1.2 APW).

The F.P. loss for the family with a child attending day care is 5.5% and 3.1% against the reference F.P. and the working family without children respectively.

Table FIN1 summarizes the results for the Finnish cases.

Table FIN1. Impact on family purse (F.P) from maternity leave and payment for childcare. Percent.

APW level	Reference family (isolated effects)		Working family, no children (transition effects)	
	Maternity	Childcare	Maternity	Childcare
1.08	-19.1	-8.6	-14.3	-3.2
1.8	-17.1	-8.8	-14.3	-5.0
2.7	-21.1	-6.7	-18.6	-3.8
3.6	-25.3	-5.5	-23.4	-3.1

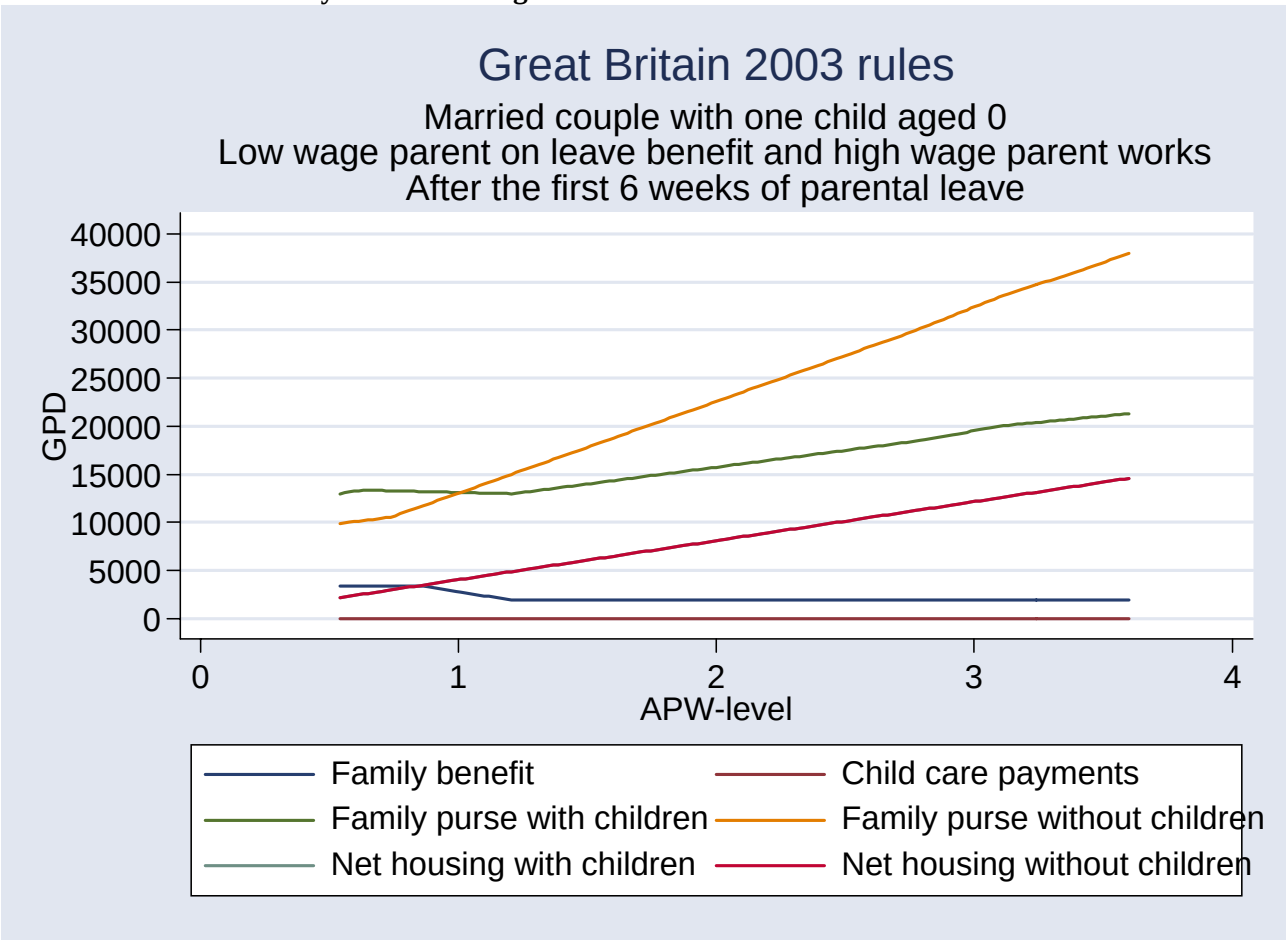
The loss from the maternity leave of the mother varies from 14.3 – 18.6% at the lower to medium income levels to 23.4% at the high income level when compared to the F.P. of the working family without children. The losses at medium to high income levels are higher than in Sweden, especially at medium income levels, but substantially lower than in the corresponding Danish cases. Compared with Norway the Finnish losses are larger up to the highest income level, 3.60 APW, where they are equal. For even higher income levels the Finnish scheme has the smallest losses because there is no maximum benefit.

Payment for childcare is relatively modest in Finland. The loss spans from 8.6 over 8.8 to 5.5% from the lowest to the highest income level in relation to the reference F.P.. Measured in relation to the F.P. of the working family without children the loss spans from 3.2 over 5 to 3.1%. The transition from a situation with work and no children to one with work and a child attending day care implies this span of losses. This is substantially more than in Sweden, a little more than in Norway, but less than in Denmark.

The first column in Table FIN1 contains the isolated effects from maternity leave and the second column contains the isolated effects from payment for childcare. The third column contains the transition effects when moving from one situation to the next, i.e. from work and no children (initial situation) to maternity leave and further on (fourth column) to work and childcare, both measured in relation to the initial situation.

4.5 Great Britain.

Graph GB1. Family purse for a married couple working and without children and for the couple when the mother is on maternity leave receiving benefits.

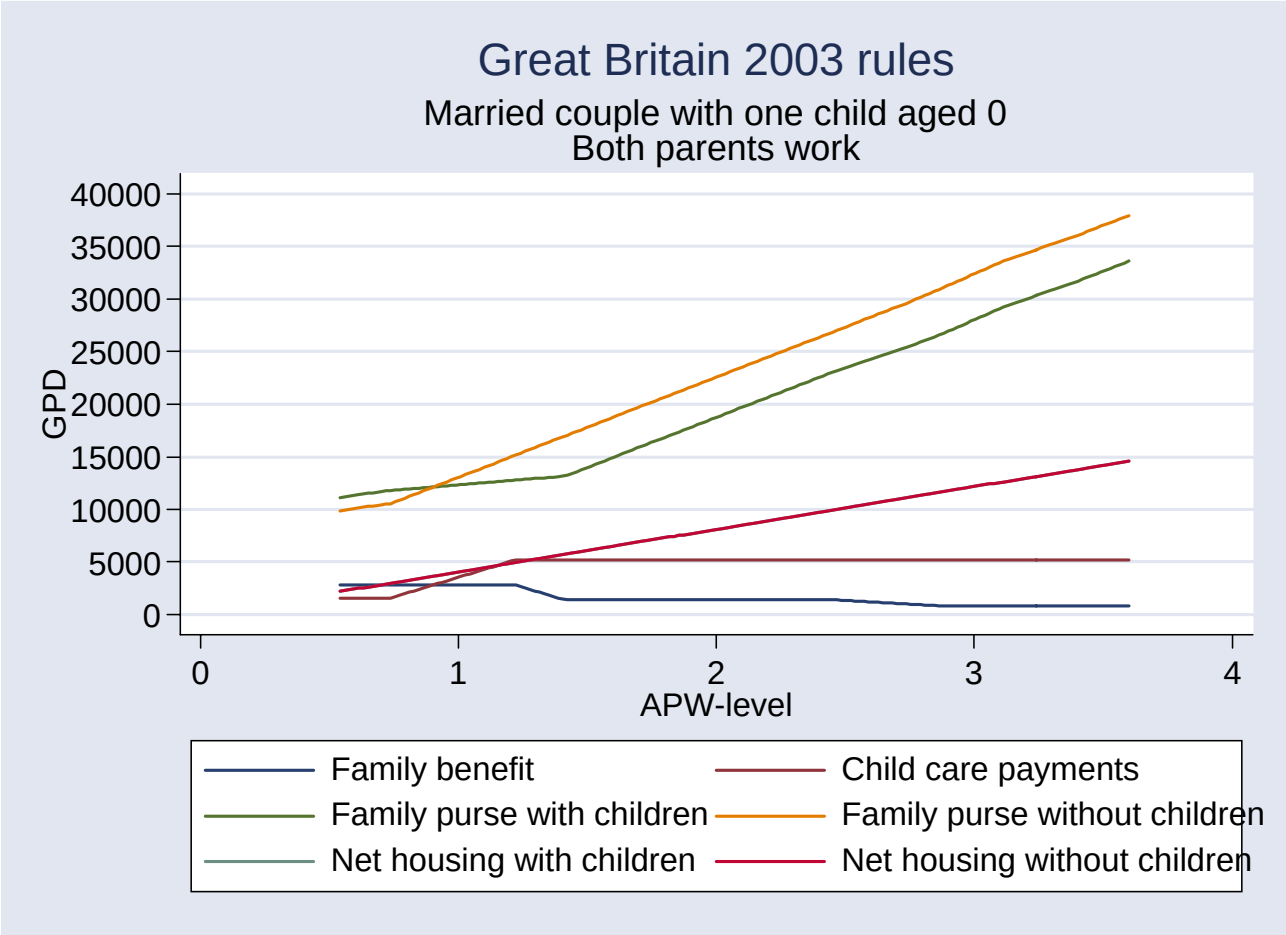


The yellow curve illustrates the F.P. for the working family without children. The British child benefits, the blue curve, consist of ordinary child benefits and the 'Child Tax Credit' (CTC). The components of CTC are tapered against income. It is the tapering of the 'child element' from the CTC scheme, which is seen in the blue curve from an income of approx. 0.8 to 1.1 APW.

The green curve illustrates the F.P. of the family when the mother is receiving the flat rate maternity leave benefit, i.e. 100 GBP/week or 90% of the former income if this is lower than the 100 GBP.

The green curve is above the yellow one up to a combined income level of approx. 1 APW, very much due to the high initial child benefits. For higher income levels the yellow curve is above the green one and the income gap increases with increasing former income. At the 3.6 APW level the gap is approx. 17,000 GBP, the largest for ordinary maternity leave in all of the countries studied.

Graph GB2. Family purse for a married couple working and without children as well as with a child attending day care.



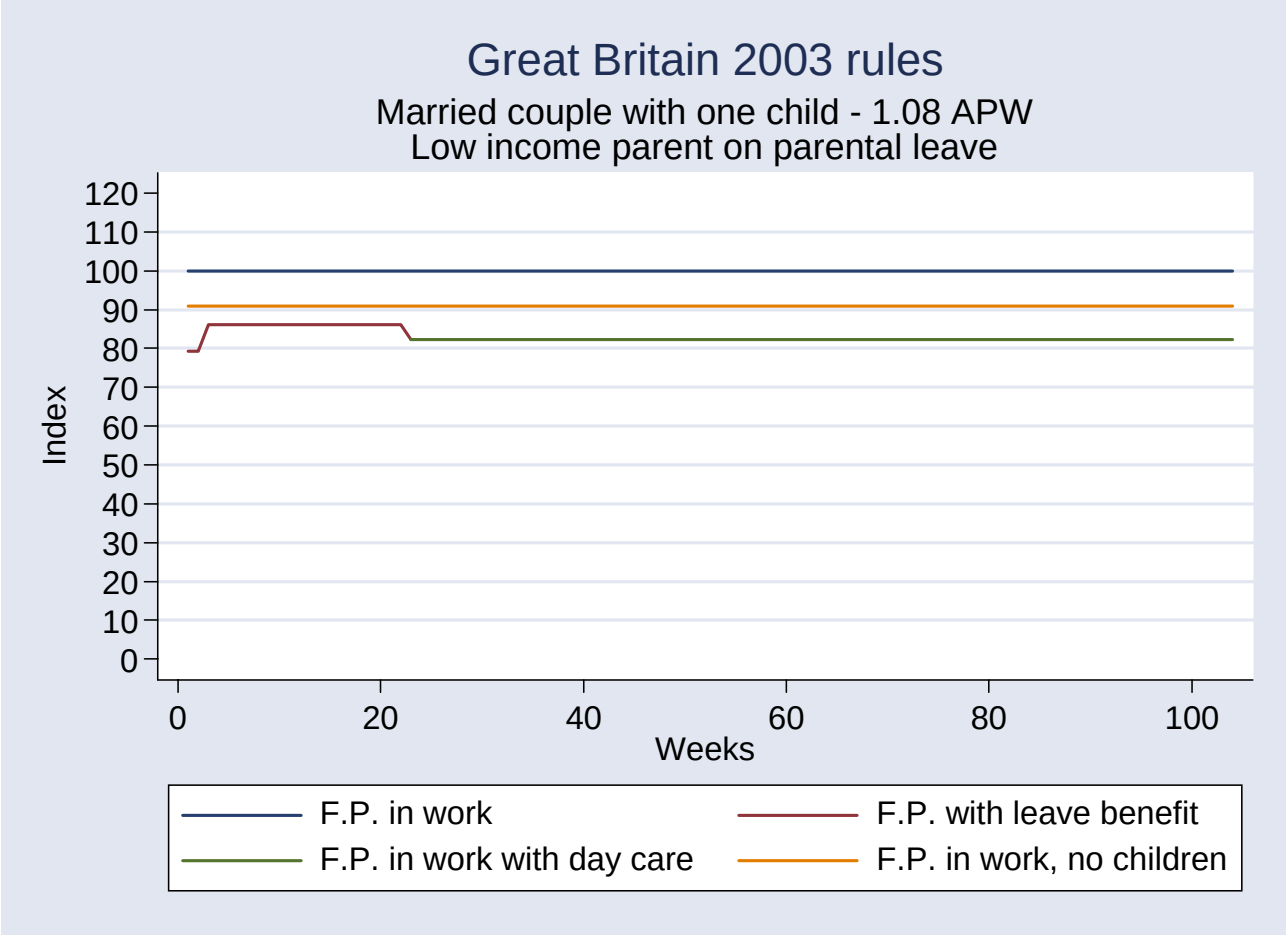
The yellow curve is the same as in Graph GB1. The dark red curve illustrates now the payment for childcare. The ‘childcare element’ of the WTC scheme compensates 70% of the payment for childcare up to a ceiling for the ‘childcare element’ of 94.50 GBP/week. In our case full payment is 100 GBP/week, the ‘childcare element’ covers the 70 GBP and the parents pay 30 GBP/week. The ‘childcare element’ is, however, tapered. The payment gradually increases from 1,560 GBP to the full rate of 5,200 GBP (annual basis) with increasing income.

The child benefit curve initially has the same profile as in Graph GB1, but the tapering of ‘the child element’ from the CTC scheme now starts at a higher income, i.e. when the ‘childcare element’ from the WTC scheme has been tapered to zero. It is also without the ‘baby element’ which stops when the child is 1 year. Day care starts before the child is 1 year old and the ‘baby element’ could have been there for the first ½ year or so, but it was decided not to include this component from the CTC scheme in the childcare situation. Furthermore, at high income levels (obtained only when both parents are working) the ‘family element’ of the CTC scheme is also tapered to zero. The tapering of these elements starts at a combined income level of approx. 2.5 APW. The blue curve ends by just containing the ordinary child benefits.

The green curve illustrates the F.P. of the working family with a child attending day care. When all the tapering is done the difference between the yellow and the green curves is 4,356 GBP. Before the ‘family element’ and the ‘baby element’ of the CTC scheme are tapered, the difference is 3,275 GBP.

The first ‘time dimension’ graph for Great Britain is Graph GB3 at the 1.08 APW income level.

Graph GB3. Relative impact on the economic situation of a married couple from maternity/parental leave and form payment for childcare. 1.08 APW income level.



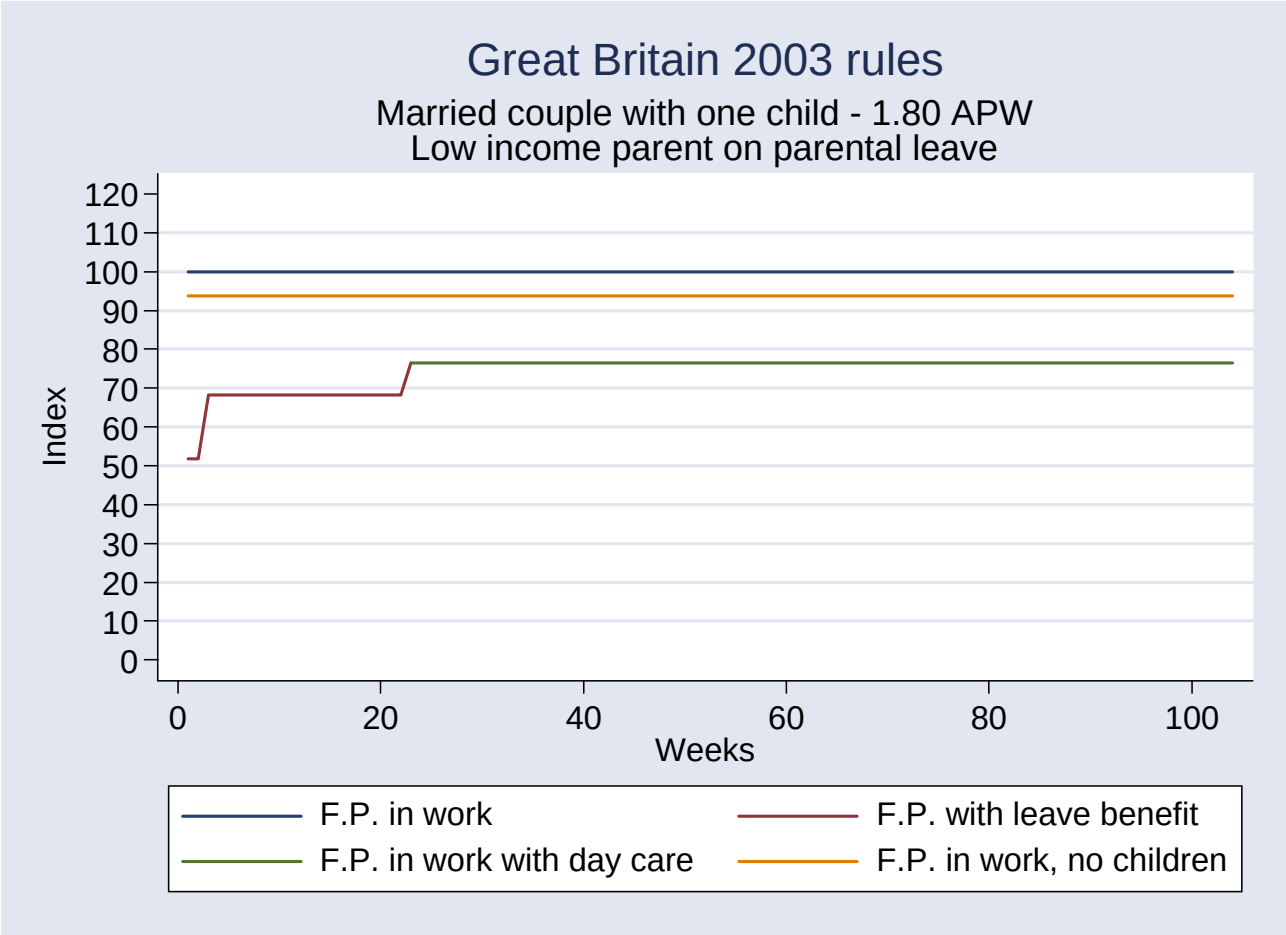
The overall reference line (dark blue = 100) is the F.P. of the working family with a child not attending childcare (see the Danish section for further information).

The first 2 weeks (red curve) illustrate the situation when both parents are on leave together just after delivery. The following 20 weeks are leave for the mother alone. The loss compared with the F.P. of the reference family is 14.0 %, measured in relation to the F.P. of the working family without children it is 5.4 %, i.e. the negative impact of moving from a situation in work without children to one where the mother is on maternity leave while the father is working.

After 24 weeks of parental leave covering 22 calendar weeks both parents work and the child attends day care. The F.P. in this situation is 17.8 % below the reference F.P., 9.6 % below the F.P. of the working family without children. The payment for childcare is not at full rate at this income level.

Graph GB4 illustrates the situation at the 1.80 APW income level.

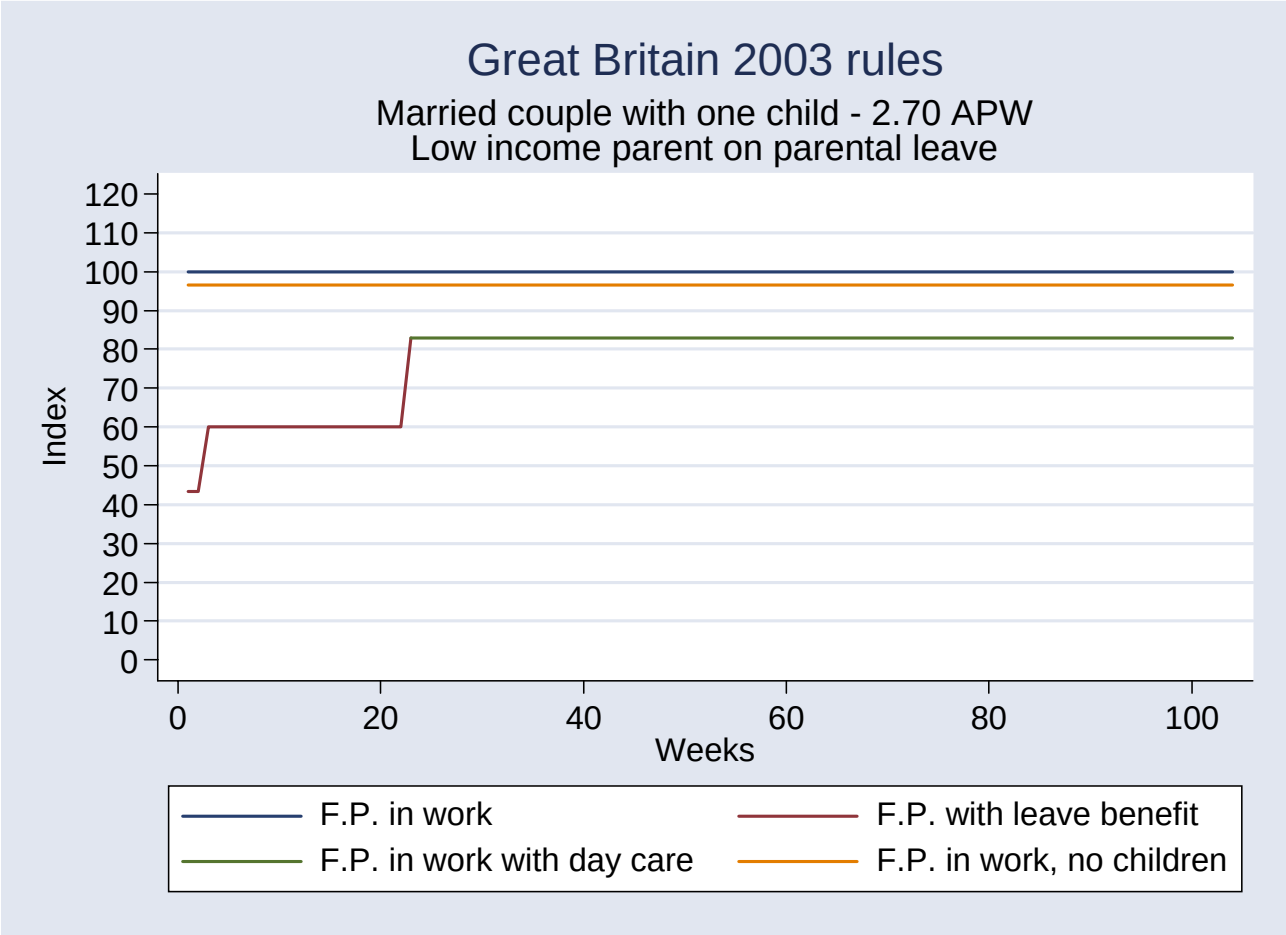
Graph GB4. Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for childcare. 1.80 APW income level.



At this income level, 1.80 APW, the F.P. is 31.8 % below the reference F.P. and 27.2 % below the F.P. of the working couple without children when the mother is on maternity leave. In the childcare situation the losses are 23.6 % and 18.5 % respectively. The 18.5 % represent the impact from the transition from maternity leave to childcare and both parents working measured in relation to the initial situation, both parents working and without children. The payment for childcare is now at full rate, i.e. 2.50 GBP/hour or 100 GBP/week.

Next, we look at the 2.7 APW income level.

Graph GB5. Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for childcare. 2.70 APW income level.

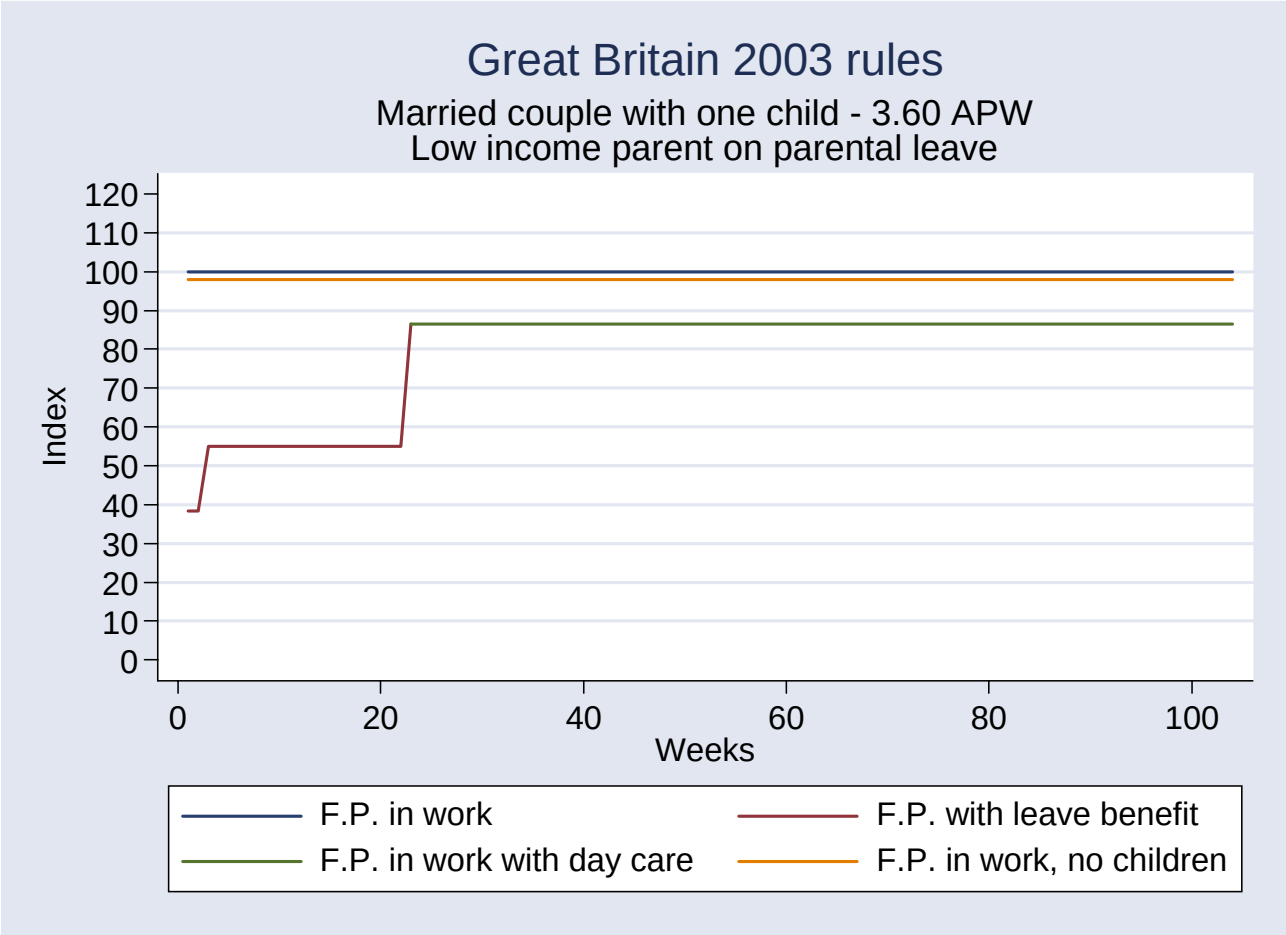


The isolated effect from maternity leave for the mother has now increased to 40.0 % at this income level, the transition from work without children to the maternity leave situation implies a loss of 37.8 %.

The isolated effect of payment for childcare is 17.2 %. The transition from work and no children to maternity leave for the mother implies a loss of 37.8 %. The next transition, back to work and now using childcare implies a loss 14.1 % measured against the initial situation, work with no children.

The last income level, 3.6 APW, is considered in Graph GB6.

Graph GB6. Relative impact on the economic situation of a married couple from maternity/parental leave and from payment for childcare. 3.6 APW income level.



At this high income level, 3.6 APW, the isolated effects of maternity leave for the mother and payment for childcare are 45.1 % and 13.4 % respectively.

The transition from a situation with work and no children to one with maternity leave implies a loss of 44.8 %. From a situation with work and no children to one with work and a child attending childcare, the loss is 11.5 %.
Table GB1 summarizes the results for the British case.

Table GB1. Impact on family F.P. from maternity leave and payment for childcare. Percent

APW level	Reference family (isolated effects)		Working family, no children (transition effects)	
	Maternity	Childcare	Maternity	Childcare
1.08	-14.0	-17.8	-5.4	-9.6
1.8	-31.8	-23.6	-27.2	-18.5
2.7	-40.0	-17.2	-37.8	-14.1
3.6	-45.1	-13.4	-44.8	-11.5

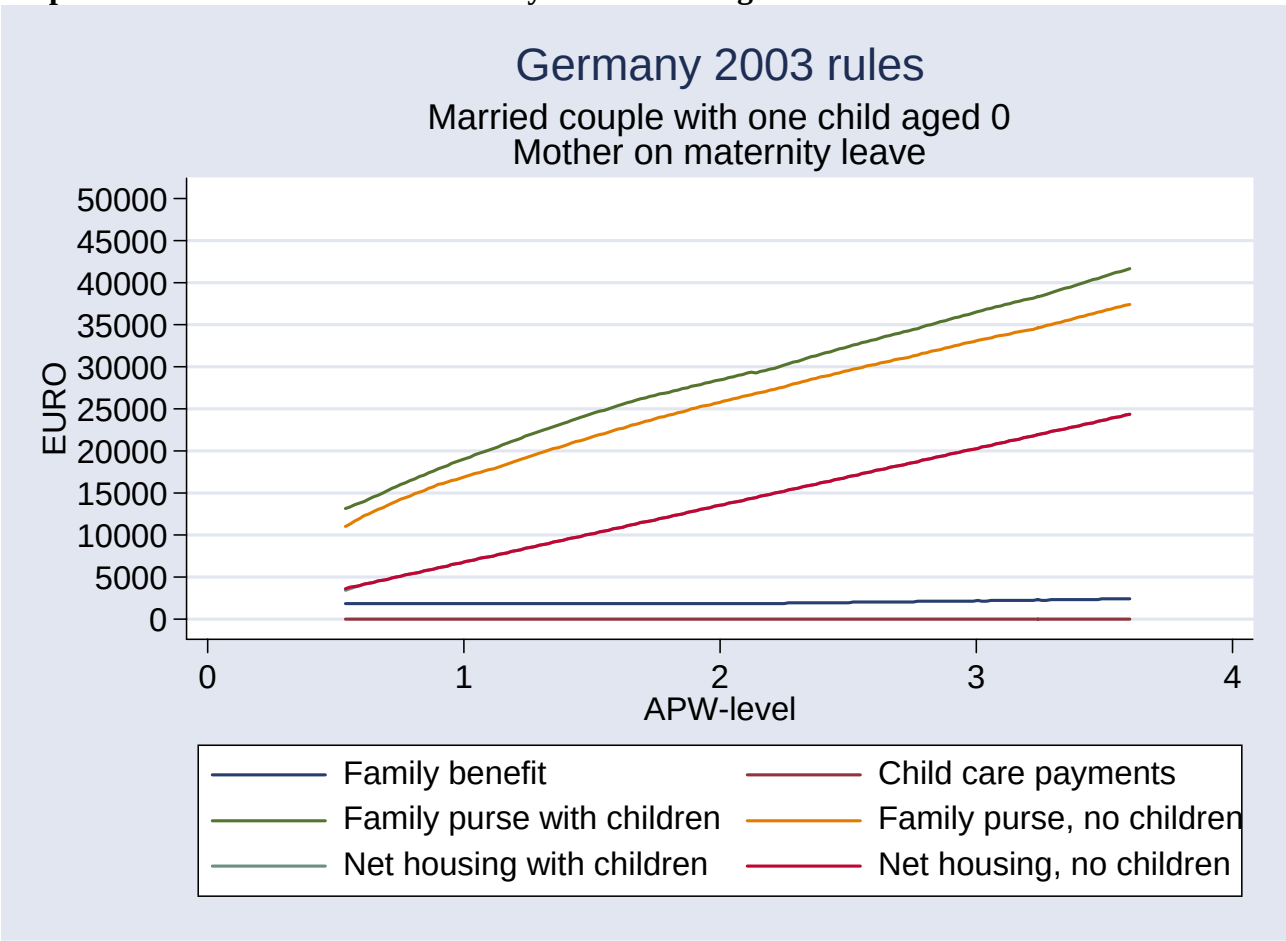
The loss from the maternity leave of the mother varies from 5.4 – 44.8 % over the income range when compared with the F.P. of the working family without children. Except at the lowest income level (where Finland is higher) Great Britain has the highest relative losses of the countries studied.

Payment for childcare is relatively expensive in Great Britain. Isolated the loss varies from 17.8 over 23.6 and 17.2 to 13.4 % across the income range considered here. Measured in relation to the F.P. of the working family without children the corresponding losses are 9.6 over 18.5 and 14.1 to 11.5%, which is higher than in any of the other countries.

The first column in Table GB1 illustrates the isolated effects of maternity leave and the second column illustrates the isolated effects of payment for childcare while the third and fourth columns illustrate the transition effects when moving from the initial situation to maternity leave and further on to work and childcare.

4.6 Germany

Graph DE1. Family purse for a married couple working and without children and for the couple when the mother is on maternity leave receiving benefits.



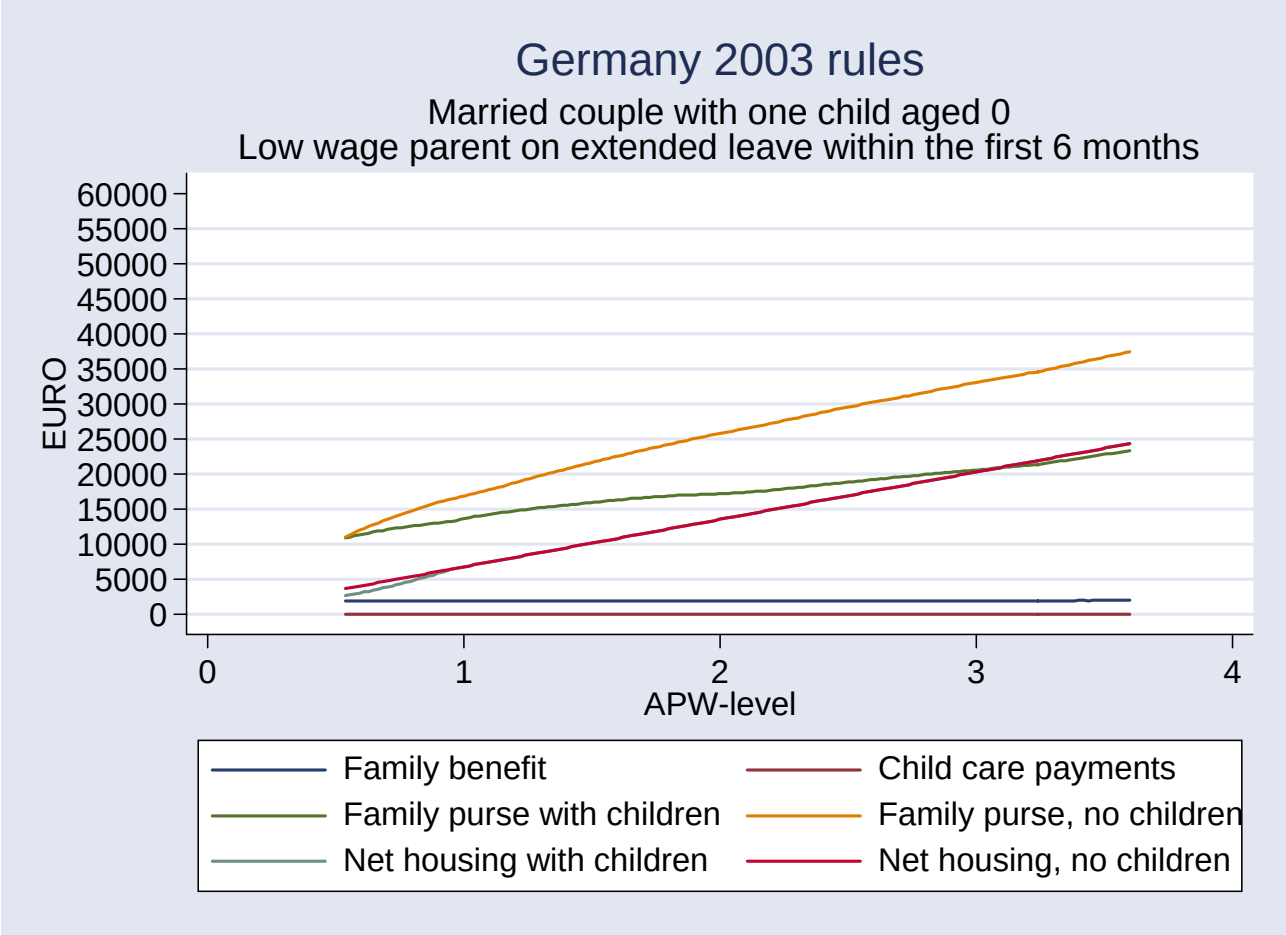
The yellow curve illustrates the F.P. for the working family without children, just as for the other countries. The German child benefits, the blue curve, consist of ordinary child benefits, which are

tax credits or the tax value of the child tax allowance if this is the most favourable choice for the family. This switch occurs at an APW level in combined (former) gross income of 2.16.

The green curve illustrates the F.P. of the family when the mother is receiving the maternity leave benefit, which is equivalent to the net income in the situation without children. To be completely correct this net income should be the former net income, but in this study it is the income from the same year, i.e. 2003.

The green curve is above the yellow one through the whole income span. This is caused by two factors: First, there are the child benefits and second, there is the special way in which the taxes of the working father are calculated. The tax of the father is calculated by the so-called splitting method explained in the section on the German regulations; the maternity leave benefit is included in the calculation of the father's tax ('Progressionsvorbehalt'). This method results in lower taxes for the father than in the situation where both spouses work.

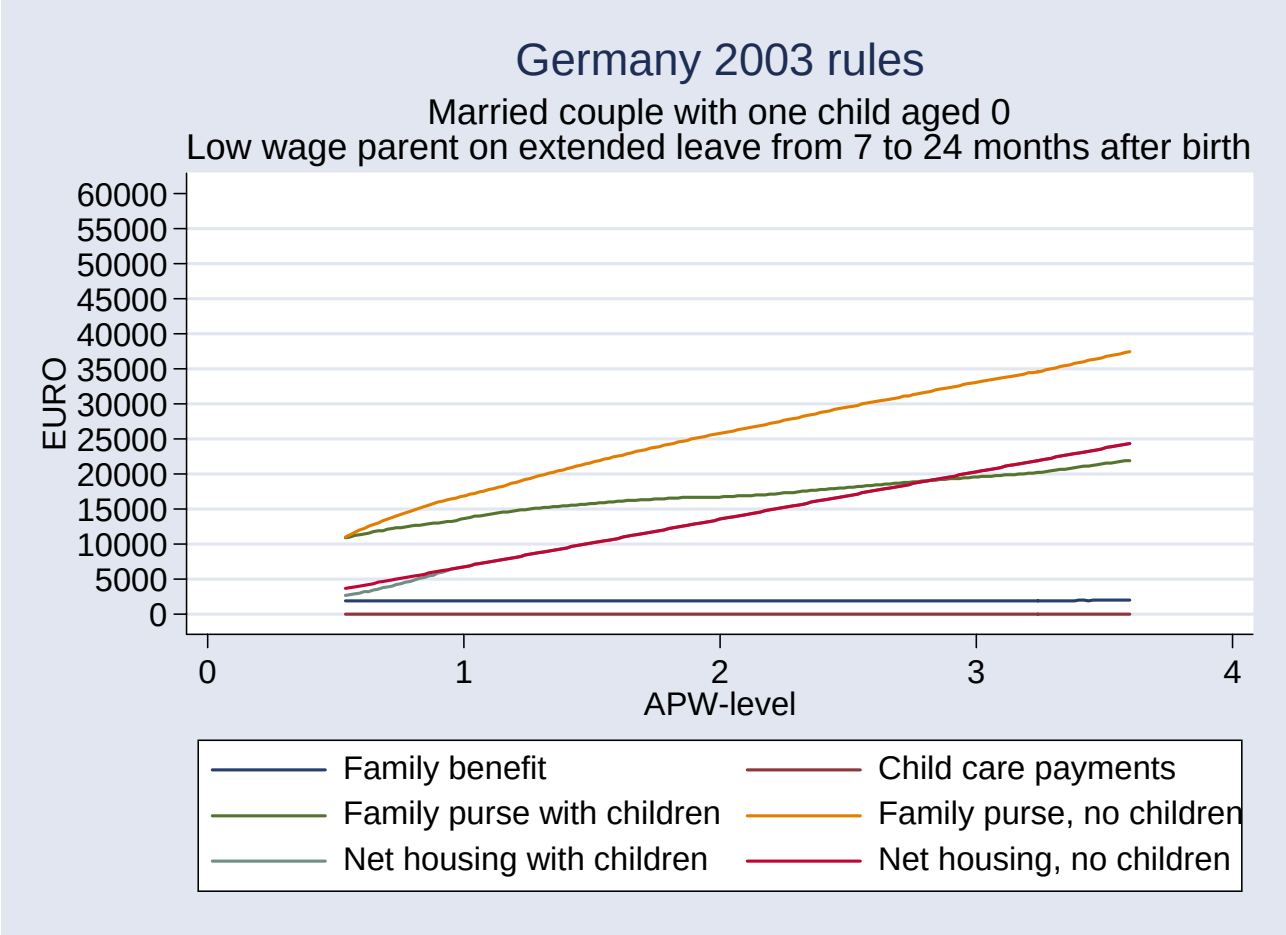
Graph DE2. Family purse for a married couple working and without children and for the couple when the mother is on extended parental leave receiving benefits, within the first 6 months after birth.



The yellow curve is for the family in work and without children, and the green curve is for the family where the mother is on 'standard' parental leave and the father works. In contrast to the situation where the mother is on maternity leave, the green curve is now below the yellow one. This is due to the flat rate profile of the parental leave benefit of 307 Euro per month. All families along

the considered part of the income distribution receive the parental leave benefit as they ‘pass’ the income test.
Other rules for the income test from the 7th month of the child’s life on lead to different results. These are shown in the next graph.

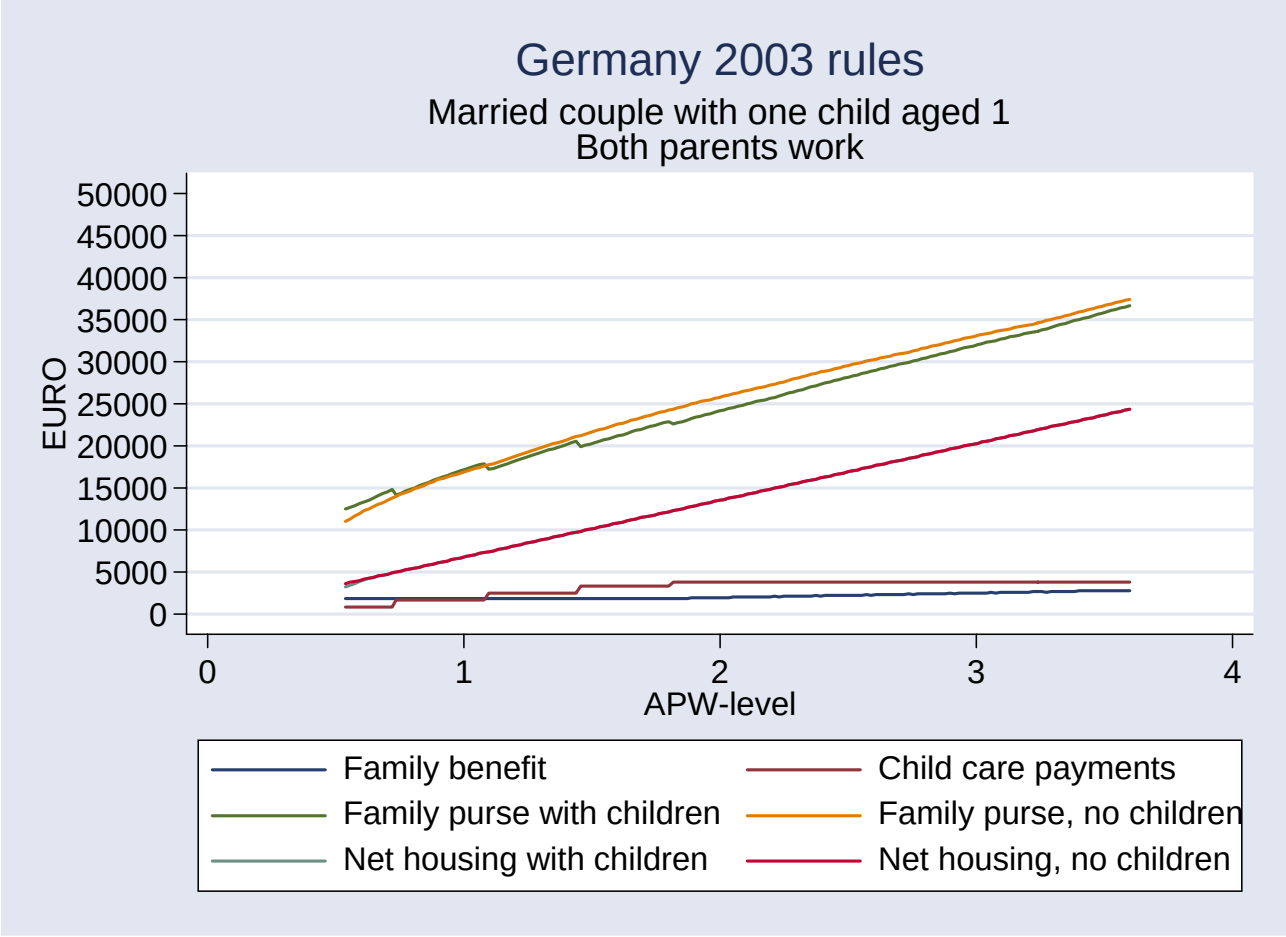
Graph DE3. Family purse for a married couple working and without children and for the couple when the mother is on extended parental leave receiving benefits from 7 to 24 months after birth.



Again, the yellow curve represents the situation of the family in work and without children, and the green curve represents the situation of the family with children where the mother is on ‘standard’ parental leave and the father works.

Since the graph illustrates the situation from the 7th month after the birth, there are other income limits in the income test for the parental leave benefit. When the couple reaches this limit, the leave benefit is reduced with 4.2% of the excess income. The couple reaches the income limit at around 1.2 APW in combined (former) gross income.

Graph DE4. Family purse for a married couple working and without children and for the couple when both parents work and the child attends childcare.



The yellow curve is the family purse of the working couple without children and the green curve is the family purse of the working couple with one child attending childcare. As shown in the graph, the F.P. of the family with children is lower than the F.P. without children for most of the income span. Only at the very low income levels, the F.P. with children is higher. However, the two curves get closer as the income increases. This is caused by the increasing tax value of the child tax allowance, at least until the maximum rate is reached.
The stair case look of the family purse with children is caused by the payment for childcare.

Even though Graph DE4 outlines a relatively generous childcare payment system, one should be aware of that there is very low childcare coverage for small children. This implies that it is only a minority among the families with children that has the possibility of having their child taken care of in an institution.

The ‘time dimension’ graphs are of the same kind as those for the other countries. The first one for Germany is Graph DE5 at the 1.08 APW income level.

Graph DE5. Relative impact on the economic situation of a married couple from maternity/parental leave and form payment for childcare. 1.08 APW income level.

The overall reference line (dark blue = 100) is the F.P. of the working family with a child not attending childcare (see the Danish section for further information).

The first 8 weeks of the three year period the mother is on maternity leave and the father works. The following 96 weeks, the mother is on ‘standard’ parental leave, while the father still works. The gain in the family purse when the mother is on maternity leave compared to the reference F.P. is around 1.6 %.

The flat rate parental leave causes the large move downwards of the dark red curve. Here the family faces a loss of around 28 % compared to the reference F.P..

When the mother returns to work the F.P. is actually higher than in the situation of a working family without children, which in percentage is about 1.5 %. This means that the child benefits and the childcare tax allowance more than offsets the costs from paying for childcare.

The next graph, Graph DE6, shows the transition at the 1.8 APW income level.

Graph DE6. Relative impact on the economic situation of a married couple from maternity/parental leave and form payment for childcare. 1.8 APW income level.

The gain the family has when the mother is on maternity leave is around 3 % compared to the reference F.P.. After the maternity leave period, the mother continues on ‘standard’ parental leave, and as shown in Graph DE6 the family purse drops even more after 26 weeks. This is caused by the stricter income limits from the 7th month and on.

The F.P. when the child attends childcare is now below the F.P. for the working couple without children. This is due to the stepwise rising childcare payments, which at the 1.8 APW level in combined former gross income still has not reached the highest level. The loss the family faces compared to the reference F.P. is of around 13 %.

The next graph, Graph DE7, shows the transition at the 2.7 APW income level.

Graph DE7. Relative impact on the economic situation of a married couple from maternity/parental leave and form payment for childcare. 2.7 APW income level.

Still the family purse of the family with the mother on maternity leave is above the reference curve (with around 1.7 %). However, the family purse now drops drastically when the mother continues on the 'standard' parental leave and thereby faces a loss of around 41.5 % and a loss of 44 % after the first 6 months.

The situation for the family when the mother returns to work and the child attends childcare, is improved compared to the 1.8 APW income level. At the 2.7 APW level the loss is of 11 % compared to the reference F.P. and 4 % compared to the working family without children.

The next graph, Graph DE8, shows the transition at the 3.6 APW income level.

Graph DE8. Relative impact on the economic situation of a married couple from maternity/parental leave and form payment for childcare. 3.6 APW income level.

At first glance Graph DE8 looks a lot like Graph DE7. However, there are differences. For instance, the gain from having the mother on maternity leave has gone up to 3.2 %.

The loss from the mother being on 'standard' parental leave within the first 6 months of the leave period is 42.3 % at the 3.6 APW level, a little higher than the loss the family faces when the income level is 2.7 APW in combined (former) gross income.

After the first 6 month the loss increases to 45.7 % compared to the reference F.P., i.e. the loss is also is higher than for the 2.7 APW level.

However, the loss the family is facing when the mother returns to the labour market and the child attends childcare, gets smaller for the high income level. This is due to the maximum payment level for childcare, which is reached at a combined income level of 1.82 APW. This means that the loss in the 3.6 APW level is of 9.3 % compared to the reference family.

Table DE1 summarizes the results for the German cases.

Table DE1. Impact on family F.P. from maternity leave and payment for childcare. Percent.

APW level	Reference family (isolated effects)				Working family, no children (transition effects)			
	Maternity	Parental I	Parental II	Childcare	Maternity	Parental I	Parental II	Childcare
1.08	+1.6	-27.8	-27.8	-8.6	+13.1	-19.6	-19.6	+1.7
1.8	+3.0	-35.6	-36.9	-12.7	+11.3	-30.4	-31.8	-5.6
2.7	+1.7	-41.5	-44.1	-11.2	+9.9	-36.7	-39.5	-4.0
3.6	+3.2	-42.2	-45.7	-9.3	+11.3	37.7	-41.4	-2.2

Note: Parental I refers to the 'standard' parental leave within the first 6 month after the child is born, and Parental II refers to the 'standard' parental leave from the 7th month and on.

The first 3 columns in Table DE1 illustrate the isolated effects of maternity leave and parental leave, the 4th column illustrates the isolated effects of payment for childcare. The last 4 columns illustrate the transition effects when moving from the initial situation to maternity leave and parental leave and further on to work and childcare.

The gain from being on maternity leave varies from 1.6-3.2 % when comparing the F.P. to the reference F.P. that is the isolated effect. We see that the gain from having the mother on maternity leave first rises and then as the income level rises. This may have to do with the family benefit which is integrated in the taxation. When looking at the transition effects, the gain has a relative high level at the very low income level, and then at the next three income levels the picture is the same as for the isolated effects, but at a higher level.

When looking at the effects from the 'standard' parental leave, the effects are overall negative and hence imply losses. In both the transitional and isolated cases, the losses grow with the income level and become quite substantial.

When the mother returns to work after her leave period and the child attends childcare, the loss the family is facing compared to the situation without children varies from 2.2-5.6 % compared to thee no-children situation and at the very low income level the family even gains 1.7%.

5. Comparisons.

In this section we compare the country cases according to two effects, namely the isolated and transition effects of the schemes considered.
The isolated effect only includes the relevant scheme, maternity leave or payment for childcare and directly derived effects from each of the schemes. The child benefits are also included in the F.P. of the reference family and so are housing benefits derived from families with children. We measure the isolated effects of different schemes against the F.P. of the reference family.
Housing benefits may be included in the isolated effects, but if so, it is only because the income from maternity benefits is lower than the former wage income, and then it is o.k. to include this effect from housing benefits in the isolated effect from maternity leave benefits, the higher housing benefits are directly generated by the maternity leave benefits.
There is also a tax effect from the maternity leave benefits. If these are lower than the former wage income taxes and social contributions are also lower, again an effect directly generated by the maternity leave benefit emerges.
Payment for childcare does usually not have an effect on housing benefits, but in Great Britain they might via the 'childcare element' of the WTC scheme, which is included in the net income base for tapering of the housing benefits. If so, it is again a direct effect from payment for childcare, because without payment for childcare there is no 'childcare element'. Payment for childcare may also have an impact on taxation, this is e.g. the case in Norway and in Germany where special tax allowances are tied to the payment for childcare.
To sum up, 'isolated' may therefore also include effects from other schemes, i.e. housing benefits and taxation, but only as a direct effect from maternity leave benefits or payment for childcare.

The 'transition effect' includes the child benefits and the housing benefits derived from families with children, because these are not included in the F.P. of the working family without children against which we measure the transition effects. These two components will to some extend counteract the usually negative impacts on the F.P. from maternity leave benefits and payment for childcare. The negative impact from the 'transition effect' will therefore be smaller than from the 'isolated effect', and any positive impact will be larger. It should, however, also be remembered that in the 'transition' situations the family is larger than in the initial situation, i.e. the claims on the F.P. have increased. This is not the case as far as the 'isolated effects' are concerned because the number of persons in the family does not change here.

The 'isolated effects' and the 'transition effects' for the two schemes, maternity leave and payment for childcare are collected in two separate tables, Table COMP1 and Table COMP2.

Table COMP1. Isolated effects from maternity leave benefits for the mother and payment for childcare. Percent.

Family Purse		Income level, APW			
		1.08	1.8	2.7	3.6
Denmark	Maternity (44 weeks)	-0.2	-18.6	-34.7	-43.8
	Childcare	-15.8	-14.7	-11.7	-10.0
Sweden	Maternity (41½ weeks)	-10.9	-11.0	-13.5	-24.0
	Childcare	-5.2	-5.7	-4.2	-3.5
Norway	Maternity (45 weeks)	-10.1	-10.5	-15.1	-25.2
	Childcare	-8.0	-7.1	-5.3	-4.4
Finland	Maternity (39 weeks)	-19.1	-17.7	-21.1	-25.3
	Childcare	-8.6	-8.8	-6.7	-5.5
Great Britain	Maternity (20 weeks)	-14.0	-31.8	-40.0	-45.1
	Childcare	-17.8	-23.6	-17.2	-13.4
Germany	Maternity (8 weeks)	+1.6	+3.0	+1.7	+3.2
	Childcare	-8.6	-12.7	-11.2	-9.3

The Danish maternity leave benefit is income related, but it is capped at a relatively low income level. There is almost no negative effect at the combined 1.08 APW income level, but when the maximum has been reached the negative impact increases rapidly with increasing income. The negative impact is higher than for any of the other Nordic countries at the three highest income levels. The Swedish, Norwegian and Finnish schemes are also income related, the Swedish and Norwegian schemes are, however, capped at a relatively high income level and the Finnish is not capped at all.

In the income range considered here the Swedish and the Norwegian schemes are close as far as relative impact from maternity leave is concerned, then followed by Finland with somewhat higher negative impacts up to the highest income level and finally, as already mentioned, Denmark with the highest negative impacts. At very high income levels the uncapped Finnish scheme will have smaller negative impacts than the Norwegian and Swedish schemes.

The British scheme has the largest negative impacts, except at the lowest income level, where the Finnish impact is larger. The German scheme has a positive impact on the economic situation of the family on all four income levels. Actually, the highest gain is seen at the highest income level, 3.6 APW in combined (former) gross income. By this characteristic the German scheme certainly differs from the other 5 countries, which all have negative impacts for this income level.

The maximum leave (for the mother alone) after delivery is relatively long in the Nordic countries, approx. 40 weeks or more, it is half of that in Great Britain, 20 weeks, and again less than half of that in Germany, 8 weeks. The maternity leave is long in the Nordic countries but with a negative financial impact on the economic situation of the family except at the lowest income level in Denmark. The leave is shorter in Great Britain and has substantial negative impacts, which are larger than in the Nordic countries with one exception.
The maternity leave scheme is shortest in Germany, however, the German families improve their economic situation when the mother is on maternity leave, contrary to the five other countries.

Payment for childcare is most expensive in Great Britain, relatively expensive in Denmark, relatively modest in Sweden with Norway and Finland in between the two other Nordic countries. In Germany the payment is cheaper than the British payment for childcare, but more expensive than in all the Nordic countries except Denmark. This comparison of the cost-dimension of childcare leaves the coverage-dimension and other quality measures unconsidered.

Table COMP2 contains the 'transition effects' for the five countries.

Table COMP2. Effects from the transition from work to maternity leave for the mother and further on to work and childcare. Percent.

Family Purse		Income level, APW			
		1.08	1.8	2.7	3.6
Denmark	Maternity (44 weeks)	+10.4	-13.7	-31.6	-41.5
	Childcare	-6.8	-9.5	-7.4	-6.3
Sweden	Maternity (41½ weeks)	-3.7	-6.4	-10.3	-21.6
	Childcare	+2.4	-0.9	-0.7	-0.6
Norway	Maternity (45 weeks)	-4.4	-6.9	-12.5	-23.4
	Childcare	-2.3	-3.4	-2.5	-2.1
Finland	Maternity (39 weeks)	-14.3	-14.3	-18.6	-23.4
	Childcare	-3.2	-5.0	-3.8	-3.1
Great Britain	Maternity (20 weeks)	-5.4	-27.2	-37.8	-44.8
	Childcare	-9.6	-18.5	-14.1	-11.5
Germany	Maternity (8 weeks)	+13.1	+11.3	+9.9	+11.3
	Childcare	+1.7	-5.6	-4.0	-2.2

The impact here includes effects from child benefits and housing benefits as well as from maternity leave benefits and payment for childcare. Effects from special tax allowances, e.g. in relation to payment for childcare are also included.

Among the Nordic countries the transition from work and no children to maternity leave and benefits for the mother implies the smallest reduction in the F.P. in Sweden. However, for the lowest income level Denmark has a gain, followed by Norway and Finland and finally with Denmark having the largest reductions at the three highest income levels (two highest in relation to Finland).
The incentives to have as short a maternity leave as possible are then highest in Denmark, except at the lowest income level, where the incentive is to maximize the maternity leave. This is on the assumption that public maternity leave benefits constitute the only income source for the mother during the maternity leave.
In Great Britain the relative loss from this transition is higher than in the Nordic countries, except at the lowest income level. German families have a financial gain from this transition due to the child benefits and the special tax calculation for the father.

Paying for childcare is relatively expensive in Denmark and modest in Sweden, with Norway and Finland in between. The transition to this situation from the initial one without children is almost financially neutral in Sweden and never claims more than 9.5% of the F.P. of the working family without children. In Denmark a comparable loss occurs at the 1.80 APW income level.
The British families have higher relative losses from this transition than families from the other countries. As was the case with the isolated effects, the German families are mostly facing greater losses than the families in Nordic countries except Denmark, apart from at the very low income level (1.08 APW) where the German families are gain 1.7 % compared to the situation of two working spouses without children, and at the highest income level, where the German loss is smaller than the Finnish one. It should be noted that the transitions from the initial situation implies an increased claim on the F.P., there is now also a child.

It should also be noted that gross wages are higher in Denmark than in the other countries because of very small employer-paid social contributions. The housing costs are therefore also higher in the Danish cases and this has a significant impact on the resulting F.P.. Using net income as basis for calculation of the housing costs would improve the Danish positions compared to those presented here, may be not the ranking, but the distance to the positions of the countries ahead of Denmark would be smaller, and larger to that of Great Britain.

Further information.

Results of the same kind for the single parent and the case where the father has the maximum rights are available on www.sfi.dk/sw20973.asp, which also contains a comprehensive documentation of all the schemes applied in the calculations.